XXIX International RESER Conference

“Services and the future of the workforce”

PROCEEDINGS (actas)

RESER, 2019

XXIX International RESER Conference, “Services and future Of the workforce”

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Up to the present, Europe and most developed countries have changed their economy transforming their model, fundamentally based on industry, into a different one which is based on service activities. As a result, in recent years, the bulk of employment has been generated by services, but this trend may be interrupted by the new emerging scenario, characterized by robots and artificial intelligence.

Thus, great challenges open up for the service sector, not only at the end of this transformation process, but also in the transition period. In fact, service activities are likely to continue to concentrate an increasing percentage of employment.

The Fourth Industrial Revolution has the potential to raise global income levels and improve the quality of life for populations around the world. But, at the same time, the revolution could yield greater inequality, particularly in its potential to disrupt labour markets. It maybe even result in a new model of income distribution in which salaries and labour retribution could lose their prominent position in favour of a universal basic income.

That point is the one that inspires the main theme of this conference. During last decades, the process of tertiarization of the employment has been quite obvious for most countries; a trend which is accentuated for the most important tertiary activities, mainly in terms of intersectoral relationships (producer services) and those related to the development of the welfare state (social services).

This 29th International RESER Conference will schedule a program in which all these issues will be addressed from the perspective of service activities and their contribution to obtain a fruitful transition toward a new economy that provides not only substantial gains in terms of productivity and wellbeing, but also in terms of equity and social values.

In 2019 RESER Conference will be organised around these main subjects:

- New services – New jobs
- Services workforce and robotization
- Services activities and economic development
- Geographical aspects of services
- Internationalization of services and services in emerging markets

This Conference is a forum for presentation and discussion of inter-disciplinary, innovative studies in service research. Scholars and practitioners of management, marketing, engineering, economics, sociology, geography, are invited to submit papers that explore and develop a multidisciplinary understanding of various service issues.

We are looking forward to see you in Ceuta!

José Aureliano Martín Segura and José Luis Navarro Espigares

Local organising committee.

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Elisa Hernández Torres	Andalusian Healthcare Service

PROGRAMA

JUEVES, 12 DE SEPTIEMBRE

08:00-09:00 h. Registration

09:00-09:30 h. Conference Opening

09:30-11:00 h. Keynote speaker. Prof. J. Alberto Aragón Correa, Professor of Management. NGA Talent & Leadership Chair. University of Granada. Sustainability and Firms: Past Evolution and Future.

11:00-11:30 h. Coffee break

11:30-13:00 h. Parallel Sessions I

Clasroom #1
New services – New jobs

1. Mr Aitor Ruiz de la Torre, Prof David Sanchez #3 Customer Needs and Key Factors in the Development of Business Models Focused on Servitization (Industry 4.0.). A Case Study.
2. Mr Morten Boesen, Mr Peter Krüger #6 Using digital technologies to improve the customer experience in credence services: lessons from the automotive industry.
3. Ms Birutė Vilčiauskaitė #16 Rethinking of Older Talents' Re-careering Trajectories in Later Life

Clasroom #2 Services activities and economic development

1. Dr Ellen Harpel #7 Gig and Independent Work in US Metropolitan Economies and Service Industries.
2. Prof Jon Sundbo, Prof Luis Rubalcaba Bermejo, Prof Faïz Gallouj #9 Servitization in the Creative and Culture Industries. Suggestion of a Model.

Clasroom #3
Internationalization of services and services in emerging markets

1. Dr Daisy Bertrand, Dr Pierre-Yves Léo, Prof Jean PHILIPPE #5 Peer to peer service platforms a new way for service internationalization? Insights from the accommodation sector.
2. Dr Leonel Corona #18 Challenges for Service innovation in developing countries. The case of Mexico
3. Mr Nikolay Chichkanov #31 Impact of Knowledge Coproduction on Innovation in Knowledge-Intensive Business Services

Clasroom #4
Services workforce and robotization

1. Dr Marialuisa Marzullo, Dr Adriana Carotenuto #11 Artificial Intelligence and Machine Learnig: Holobotics Experience Model
2. Ms Jurga Vesterte, Prof Ilona Skackauskiene #14 Exploring the methodological potential for decision-making in service modularization planning

13:00-14:00 h. Lunch

14:00-15:30 h. Parallel Sessions II

Clasroom #1
New services – New jobs

1. Prof Ida Gremyr, Dr Frida Smith, Prof Mattias Elg, Dr Erik Eriksson, Prof Árni Halldórsson, Dr Susanne Gustavsson #19 New roles in healthcare services resulting from increased patient involvement
2. Ms Ane Bast, Dr Marit Engen, Dr Maria Røhnebæk #20 Transforming and Cocreating Dementia care
3. Mr Jose Luis Navarro Espigares #57 Workforce Trends in Health Care Services

Clasroom #2 Services activities and economic development

1. Dr Benoît Desmarchelier, Prof Faridah Djellal, Prof Faïz Gallouj #10 Innovation in Public Services in the Light of Public Administration Paradigms and Service Innovation Perspectives
2. Mr Gard Ringen Høibjerg #12 The Use and Abuse of Vegetational Concepts and Terms Revisited: Rethinking Service Systems and Service Ecosystems
3. Prof Jose Maria Biedma, Prof Christian Bourret, Dr Nathalie Fabry, Dr Sylvain Zeghni #13 Data Use Issues in the Health and Tourism Interfaces as New Services

Clasroom #3

Geographical aspects of services

1. Prof Metka Stare, Prof Andreja Jaklic, Mr Klemen Knez #24 Is international trade in services changing the position of CEECs in GVC?
2. Prof José Aureliano Martin, Mr. Alejandro Ramírez #26 Cross-Border Trade from Ceuta to Morocco. Analysis of its Impact on the Local Economy
3. Dr Ingrid Fasshauer #30 Living lab, a device for "smart" rural territories?

Clasroom #4
Services workforce and robotization

1. Ms Veronika Belousova, Ms Dzhamilya Abuzyarova, Ms Zhaklin Krayushkina, Ms Yulia Lonshcikova, Ms Ekaterina Nikiforova, Mr Nikolay Chichkanov #32 A Reinforced Role of Human Capital for Science, Technology and Innovation
2. Dr Takeshi Takenaka #35 Re-design of service systems based on employee satisfaction, customer satisfaction and labour productivity
3. Dr Jørn Møller #41 Digitalization and Servitization in the Offshore Wind Industry

15:30-16:00 h. Coffee break

16:00-17:30 h. Parallel Sessions III

Clasroom #1
New services – New jobs

1. Prof Magali Dubosson, Prof Emmanuel Fragniere, Prof Anne-Sylvaine Heritier, Mr Samuele Meier, Mr Charles Wainwright #27 A call for more socialization (SECI) to counter growing incivilities and impatience of end users through a human risk framework dedicated to frontliners
2. Prof Magali Dubosson, Prof Emmanuel Fragniere, Dr Denis Rochat, Mr Marshall Sitten, Mr Eric Berdeaux #33 Developing an AI and digitization service typology to take into account the particularities of new jobs and/or organizations according to different sectors of activity: an empirical study conducted in Switzerland

Clasroom #2 Services activities and economic development

1. Dr Céline Merlin-Brogniart #15 Social innovation networks, co-creation and innovation dynamics: the case of civic service projects
2. Prof Liudmila Bagdoniene #22 Does resource scarcity encourage co-located organizations to cooperate in co-creating service innovation?
3. Dr Oscar Montes Pineda, Prof Faïz Gallouj, Prof Luis Rubalcaba Bermejo #39 Social Innovation and Educational Services

Clasroom #3
Geographical aspects of services

1. Dr Dioni Elche, Dr Ángela Martínez-Pérez, Dr. Pedro M. García-Villaverde #67 Social capital and market dynamism as determinants of pioneering orientation
2. Dr Davide Consoli, Dr Dioni Elche, Dr Mabel Sanchez-Barrioluengo #68 From brawn to brains: manufacturing-KIBS interdependency

Clasroom #4 Internationalization of services and services in emerging markets

1. Prof Andrew Jones, Prof Patrik Ström #42 Service economy integration in Latin America – international connection and value chain upgrading.
2. Dr Clara Belén Martos Martínez, Dr Marta Muñoz Guarasa #47 Importance of Intellectual Capital for KIS to be Born Global since its creation: Mixed Methods Approach
3. Mr Manik Batra, Udita Taneja #49 Perceived Service Quality and Patient Satisfaction: A Study of Hospitals in a Developing Country

17:30-19:00 h. Parallel Sessions IV

Clasroom #1
New services – New jobs

1. Dr Kenan Wassouf, Dr Noama Abbas #54 Les facteurs déterminants la fidélité du consommateur au système Drive : une étude appliquée à Carrefour Drive.
2. Prof Yi Liu, Prof Wenxiu Li #45 Ridesharing and Air Pollution: Evidence from Didichuxing
3. Mrs Charlotte Feraille, Dr Claudie Meyer, Prof Christian Bourret #48 Innovative Services and Creation of new Ecosystems : the Case of two Tourism Platforms and their Impacts on Workforces.

Clasroom #2 Services activities and economic development

1. Mr José Aureliano Martin Segura, Ms. Gozal Ahmadova #25 Socio-Economic impact of the Granada Science Park on the local economy
2. Prof Maria Colurcio, Dr Fabiola Sfodera, Prof Isabella Mingo, Prof Alberto Mattiacci #34 Service Ecosystem design: the role of technology

Clasroom #3
New services – New jobs

1. Dr David Gago #60 Co-creating the future of work: the role of living labs as spaces of interaction
2. Dr Marco Tregua, Dr Cristina Caterina Amitrano, Dr Roberta Gargiulo, Prof Tiziana Russo Spena, Prof Francesco Bifulco #59 From the Wall to the Screen: Artworks at the Box Office
3. Prof Alberto Pastore, Dr Angela Carida, Prof Maria Colurcio, Prof Bo Edvardsson, Dr Monia Melia #58 Fuelling Novel And Sustainable Service Ecosystems: The Orchestrating Role of Engagement Platforms

Clasroom #4 Services activities and economic development

1. Ms Raquel Ferrero Prieto, Dr Jose Manuel de la Torre, Dr Eulogio Cordon-Pozo, Dr María Dolores Vidal #36 Effect of Compensation Information on Compensation Effectiveness
2. Dr Mervi Rajahonka, Mrs Kaija Villman #37 From lifelong earning to lifelong meaning - Perspectives to lifelong learning and sustainable careers of women in service businesses
3. Dr Mervi Rajahonka, Mrs Kaija Villman #38 A Maturity Model for Service Development for SMEs

19:00-19:15 h. 2020 Presentation Conference: Prof. Luis Rubalcaba

19:15-19:30 h. End of session's day 1

19:30 h. City walk

21:30 h. Social activity: Ceuta Research Institute / Ceuta City H

VIERNES, 13 DE SEPTIEMBRE

08:30-10:00 h. Parallel Sessions V

Clasroom #1
New services – New jobs

1. Dr Eduardo Castellano, Dr Urko Lopez #61 Design process of a servitization Roadmap for Basque manufacturing cooperatives
2. Mr Morten Hansen, Mr Niels Christoffersen, Mr Per Laugesen #63 Developing E-government solutions in Denmark – balancing public/private and civic/customer perspectives
3. Mr Fabio Iannone, Dr Vera Ferrón Vilchez #69 The importance of environmental training on green public procurement

Clasroom #2 Services activities and economic development

1. Mr Pablo Ortega Carrasco, Dr Vera Ferrón Vilchez #29 The suitable organizational characteristics for signalling Corporate Social Responsibility practices in industrial and services companies
2. Dr Benoît Desmarchelier, Prof Faridah Djellal, Prof Faïz Gallouj #51 Mapping Social Innovation Networks
3. Dr Eulogio Cordon-Pozo, Dr Jose Manuel de la Torre, Dr María Dolores Vidal, Ms Raquel Ferrero Prieto, Prof José Aureliano Martin #56 More is not always better! Innovation Training and the performance of innovation in the financial sector

10:00-10:30 h. Coffee break

10:30-12:00 h. Round table: Services and the future of the workforce. Hair: Marie-Christine Monnoyer (Doyen de la Faculte de Droit en Institut Catholique de Toulouse – RESER Council and Founder Member)

12:30-13:30 h. Keynote speaker: Jorge Casilla, PhD Associate Professor Dept. Computer Science and Artifical Intellligente University of Granada. All that glitters is not gold in Artificial Intelligence; welcome to its dark side

13:30-14:30 h. Lunch

14:30-16:00 h. Parallel Sessions VI

Clasroom #1
New services – New jobs

1. Ms Milena-Jael Silva-Morales, Ms Silvia Gliem, Ms Magdalena Stuebner, Prof Camal Gallouj #70 Multi-service urban digital platforms as a system of systems to support the advent of smart service systems for smart cities: What challenges on new ways of working?
2. Ms Mª Trinidad Montes, Mr Gabriel Garcia-Parada #72 Entrepreneuriat senior, option ou obligation?

Clasroom #2 Services activities and economic development

1. Ms Estibaliz Hernandez Eleno, Ms Iñaki Fernandez #66 A multidimensional model to assess knowledge intensive business services (KIBS) firms’ competitiveness
2. Dr Martin Falk #65 Hotels benefit from stricter Airbnb regulations

3. Dr Francisco Rejón-Guardia, Prof Guillermo Maraver-Tarifa #62 Measurement model proposal for the evaluation of teaching performance by the students according to the conceptual framework of the dominant service logic theory.

Clasroom #3
New services – New jobs

1. Mr Christophe Said, Prof Giuseppe Strina, Dr Feriha Özdemir #64 Developing digital service systems innovations in SME especially crafts
2. Mr Pedro Costa, Ms Elisabete Tomaz, Ms Maria Assunçao Gato, Ms Margarida Perestrelo, Ms Ana Rita Cruz #73 Assessing creative tourism initiatives in small cities and rural areas of Portugal: an integrative model for local impacts
3. Ms Silvia Stuchi, Ms Sonia Paulino #76 Towards Sustainable Urban Mobility: service innovation and tactical urbanism initiatives

16:00-16:15 h. Closing session. RESER 2019

16:15-16:45 h. Coffee break

16:45-18:30 h. General Assembly

18:30 h. End of session's day 2

19:30 h. City walk

21:30 h. Gala Dinner

ABSTRACTS

JUEVES, 12 DE OCTUBRE

11:30-13:00 h. Parallel Sessions I

Clasroom #1

New services – New jobs

Mr Aitor Ruiz de la Torre, Prof David Sanchez

Customer Needs and Key Factors in the Development of Business Models Focused on Servitization (Industry 4.0.). A Case Study.

ABSTRACT: Management and evolution of servitization today, is a complex concept of difficult applicability. Understanding the amount of information with which is work, the operating of the market and the end customer means that there are more opportunities for successful servitization. It is therefore very important to understand the way of working of each company in order to understand the current situation and can evolve practices to ensure their development in each scenario.

OBJECTIVES: The purpose of this paper is present the most worldwide experienced automotive OEM & Tier 1 industries necessities in the evolution of the servitization, focused in the better applicability of the industry 4.0.

For that reason, this paper emphasizes real life complexity in industry 4.0 implementation background in the search of the most common pains, gains and customer jobs in this field.

METHODOLOGY: The paper uses an explanatory single-case study approach based on semi-structured interviews. Ten senior managers were interviewed from 5 different customers, resulting in more than 300 concept results of interview data. Data were analyzed more in deep through a qualitative research analysis by an emergent identification of patterns.

EXPECTED RESULTS: This research identifies key concepts in the servitization implementation of the automotive companies undergoing into the industry 4.0. evolution. This study concepts are summarized into eleven levelers which constitute the challenges in the servitization. Each challenge provides the full description of automotive OEM & TIER 1 necessities and operations in the servitization enforcement.

Mr Morten Boesen, Mr Peter Krüger

Using digital technologies to improve the customer experience in credence services: lessons from the automotive industry.

OBJECTIVES: This paper extends our understanding of how new digital technologies can reduce some of the risks and difficulties involved with buying, consuming and evaluating credence services. Consumers find it more difficult to evaluate the quality of services than goods as services are intangible and heterogeneous. This lead to distinctive evaluation processes when dealing with services compared to goods in all stages of the buying and consumption processes (Bebko, 2000; Wilson, Zeithaml, Bitner, & Gremler, 2016). The literature distinguishes between three categories of properties: search, experience and credence (Darby & Karni, 1973). Offerings with high search properties can be determined prior to a purchase, while offerings with a high degree of experience properties can only be evaluated properly after purchase and consumption. By contrast, offerings with high credence properties may be impossible to evaluate even after purchase and consumption (Mitra, Reiss, Capella, & Reiss, 1999; Mortimer & Pressey, 2013). For services in general and for credence services particularly, consumers are forced to rely on different cues when assessing the quality of the service. Service providers can use various physical evidence (e.g. advertisement material, interior and exterior) to signal certain qualities about their offerings. Moreover, with the rise of the internet 2.0, consumers can search for information through social media and online review sites, thereby reducing risk and helping consumers feel more confident about their choice of service provider. Recently, new technologies such as smart phones, virtual reality and augmented reality have emerged, giving new opportunities for service providers to create cues that will reduce the perceived risk of buying and consuming service offerings. Yet, research on how these technologies might influence consumers’ evaluation of service quality of credence services particularly, remains under-researched.

METHODOLOGY: Empirically, this paper takes a user-centered perspective (Lemon & Verhoef, 2016) by focusing on the user journey of buying automotive services as its main analytical unit, aiming at identifying the possible pains, risks and difficulties that users face when buying, consuming and evaluating automotive services. The data for the user journeys is based on observations of and interviews with users of automotive services. Moreover, the paper is based on data collected through action research, exploring how three specific automotive service providers can use new digital technology to improve the customer experience.

EXPECTED RESULTS: The empirical focus of the paper is automotive services which are considered as a credence service. In automotive services consumers' lack of technical knowledge lead to high perceived risks when buying automotive services which can potentially make it a frustrating and uncomfortable experience. However, we find empirical evidence revealing that providers of automotive services can reduce this perceived risk by integrating new digital technology in the service delivery. Practical ways to overcome the identified pains using new digital technology are discussed.

Ms Birutė Vilčiauskaitė

Rethinking of Older Talents' Re-careering Trajectories in Later Life

OBJECTIVES: Talents have rarely been as important to the success of organizations as it is today. Without the right talent, organizations' promises are unfulfilled, business growth is short-term (Ulrich et al, 2011), i.e. identification and retention of talents is crucial for maximizing organizational performance (Gallardo et al., 2013; Nijs et al. 2014). But at the same time, population is aging and it is global trend, closely related to significant improvement of life expectancy and living conditions as well as medical issues. Adults in later life are a diverse group with varied career development needs. Moreover, the studies of career development for older talents are very rare. It is important to gain a better understanding of older workers and their motivation. This will help organizations develop policy for ageing workers that meets both organizational and individual needs and shifts the discourse surrounding older workers (Fabisiak and Prokurat, 2012; Schlosser et al. 2012). Work is very important for every adult (including older adult) person, because it gives the meaning, direction and purpose in life. In fact, with longer life spans and the trend towards working longer, a new phase of career is emerging: later life career (Cook, 2016). This new phase of career provides an opportunity for older adults to pursue work options and contribute their skills, knowledge, and experience to the community (Cook 2015). By taking into account the expectations, it should be noted that older talents have their several later life career options such as: „bridge employment" and alternative career paths (job mobility (as opposite to embeddedness), mentorship, volunteering, and later life entrepreneurship).

EXPECTED RESULTS: Older talents' expectations and employers' expectations were examined to predict four types of re-careering trajectories (job mobility, mentorship, volunteering, and later life entrepreneurship) and to compare them.

It should be noted that majority of the respondents mentioned that the most valuable benefits given by the older talents are their working experience, knowledge and skills, ability to become coachers and mentors for younger employees (sometimes for free), as well as serving an example for them. Also it is very important to highlight, that older talents require less supervision, which is mostly determined by their experience, skills, reliability and engagement in what they to.

The main similarities could be found among the companies in Lithuania among catering services, consulting, trade and agribusiness, and some significant differences among manufacturing, technology and banking industries. The conceptual model that reveals the linkage between older talents' expectations and re-careering trajectories in later life is developed.

OBJECTIVES: (1) Conceptualize talent, older talent within the context of the world of work. (2) Disclose the extent and nature of re-careering in later life. (3) Identify the expectations relevant to older talent. (4) Outline the re-careering trajectories in later life. (5) Develop the conceptual model that reveals the linkage between older talents' expectations and re-careering trajectories in later life.

Clasroom #2 Services activities and economic development

Dr Ellen Harpel

Gig and Independent Work in US Metropolitan Economies and Service Industries.

OBJECTIVES: One feature of the changing nature of work is an increase in "gig and independent" work. "Gig and independent" work includes a variety of full-time and part-time activities for earning income outside of an employer-employee relationship. It is often temporary or project-based, is mostly self-directed, and offers freedom and flexibility but also insecurity and unpredictability. It extends well beyond online platforms, such as Uber. In the US, most gig and independent work occurs within service industries.

Preliminary analyses suggest that gig and independent work is substantial and growing, but the characteristics of that work are not well understood beyond the headline level. Further, while gig and independent work does not appear to be an economic driver, it will likely influence regional prosperity and competitiveness since it plays an important supporting role in many leading services industries. Finally, demographic and industry trends suggest that more individuals are likely to find themselves engaged in gig and independent work at some point – or multiple points – over the course of their careers.

This paper will describe the attributes of gig and independent work in a set of US metropolitan economies and in the US as a whole, with an emphasis on determining its role within select service industries by region. It will conclude with implications for worker reskilling, public economic development work, and social policies. The objective is to provide a more thorough understanding of this aspect of the changing nature of work to inform economic and policy discussions.

METHODOLOGY: There is no single source of data on "gig and independent work" in the US or its metropolitan economies, which has hindered both economic analysis and policy responses to the phenomenon.

This paper will build on previous research by the author combining multiple sources to create a more complete understanding of gig and independent work at the metropolitan level. Data will be obtained on several aspects of "gig and independent work" from federal data sources, including the Bureau of Labor Statistics, Bureau of Economic Analysis, US Census, and Office of Tax Analysis. This data will be supplemented with reports from consulting firms, policy organizations, and industry groups that rely on surveys to add color to the federal data resources.

Data for the US as a whole plus data for a set of diverse US metropolitan areas will also be analyzed and compared, where possible. The preliminary set of US metropolitan regions includes Washington, DC; Phoenix, AZ; Detroit, MI; Atlanta, GA; Houston, TX; and San Francisco, CA.

Descriptive and comparative statistics will be presented on the number of people estimated to be involved in different elements of gig and independent work, along with growth trends; demographic characteristics of gig and independent workers; total and average income associated with this work; and the importance of gig and independent workers by services industry category.

EXPECTED RESULTS: The results of this research will be 1) a set of data guidelines for other analysts to use to understand the evolving scale, scope, and characteristics of gig and independent work in US metropolitan areas; and 2) a better understanding of the nature of gig and independent work that will help policymakers respond more effectively to the implications for individuals (skills, training, career planning), businesses (competitiveness, hiring trends), and society (social safety net, income distribution).

Prof Jon Sundbo, Prof Luis Rubalcaba Bermejo, Prof Faïz Gallouj

Servitization in the Creative and Culture Industries. Suggestion of a Model.

ABSTRACT: Management and evolution of servitization today, is a complex concept of difficult applicability. Understanding the amount of information with which is work, the operating of the market and the end customer means that there are more opportunities for successful servitization. It is therefore very important to understand the way of working of each company in order to understand the current situation and can evolve practices to ensure their development in each scenario.

OBJECTIVES: The purpose of this paper is present the most worldwide experienced automotive OEM & Tier 1 industries necessities in the evolution of the servitization, focused in the better applicability of the industry 4.0.
For that reason, this paper emphasizes real life complexity in industry 4.0 implementation background in the search of the most common pains, gains and customer jobs in this field.

METHODOLOGY: The paper uses an explanatory single-case study approach based on semi-structured interviews. Ten senior managers were interviewed from 5 different customers, resulting in more than 300 concept results of interview data. Data were analyzed more in deep through a qualitative research analysis by an emergent identification of patterns.

EXPECTED RESULTS: This research identifies key concepts in the servitization implementation of the automotive companies undergoing into the industry 4.0. evolution. This study concepts are summarized into eleven levelers which constitute the challenges in the servitization. Each challenge provides the full description of automotive OEM & TIER 1 necessities and operations in the servitization enforcement.

Clasroom #3 Internationalization of services and services in emerging markets

Dr Daisy Bertrand, Dr Pierre-Yves Léo, Prof Jean PHILIPPE

Peer to peer service platforms a new way for service internationalization? Insights from the accommodation sector.

OBJECTIVES: The rules of management and marketing services were developed in the context of a company offering a service in a given place to well identified customers and delivered by the staff in contact. A fully new business context is appearing with the development of Internet peer-to-peer (P2P) service platforms (such as Airbnb): services are provided by non-professionals to consumers via an electronic trading platform.

As regards to service internationalization, the need for customer/supplier interaction and the difficulty to manage this interaction at distance have set the framework of international entry mode of service acknowledged by the World Trade Organization. However, information technology has reshaped the service structure and modified the way of selling and delivering services abroad. P2P service platforms apparently belong to the mode 1, as identified by the WTO, because they deliver information services which can easily cross the borders. However, the peer-topeer interactions they organize, were usually performed according to mode 4 (professional service network), mode 3 (staff movement) or mode 2 (customer movement). These new enterprises rapidly expand in terms of turnover or asset value. Some are even involved in an internationalization process that recalls the “born global” small or medium sized firms.

The paper aims to propose an exploratory analysis of peer to peer sharing accommodation platforms operating in France, in order to picture their international involvement according to their country of origin, and to the means they have put forward in their internationalization process.

METHODOLOGY: The present study focused on the accommodation sector because it’s certainly the most competitive sector with a traditional market player and the sector where internationalisation process is the most advanced.

First, an exhaustive mapping of peer-to-peer sharing platforms operating in France was carried out, using systematic internet searches. These platforms were then subjected to an in-depth structural analysis and information was systematically collected to analyse the extent of their internationalization and the specific ways they used. We gathered indices from the supply side (number of offers per country), from the consumer side (number of clicks on the website by country of origin) and from the platform side (how many and which languages are available, presence of permanent offices abroad …). These indicators were used to qualify the path of the platform international expansion.

EXPECTED RESULTS: At this stage our research questions are explorative, and the scope adopted is largely a descriptive one. The systematic mapping process leads to identify 47 peer-to-peer accommodation platforms acting in France. These platforms are very heterogeneous in terms of their origin, size, attendance and mode of operation. In the first part, these platforms and their characteristics will be briefly described. Two classifications will then be reported, based (1) on the counterpart required by the supplier and (2) types of services offered by platforms. These classifications will then be compared with the international opening of the platforms as declared on the websites. A rapid overview showed great differences in international involvement characteristics.

The last section analyses more in depth their international involvement. The following questions are treated. How do these platforms:

- present the service abroad via their websites (foreign languages used and countries of presence)?
- manage abroad the consumer’s interaction because for platforms, presence does not mean setting up locally.
- set their international pace (country of origin, duration of expansion, geographical diversification and export turnover).

Finally, we will draw from this analysis a typology of internationalized accommodation platforms and try to identify some key factors of success.

Dr Leonel Corona

Challenges for Service innovation in developing countries. The case of Mexico

OBJECTIVES: Some future economic problems of the impact of service innovations in the work force due to robotization and artificial intelligence are analyzed in the context of a developing country: Mexico.

METHODOLOGY: First, there is already in the literature a proposal of 20 innovation advances and challenges for the future (Bell, 2015), as well as the 15 Service innovation challenges developed based on the assimilation/ demarcation and inversion/integration perspective concept of (Gallouj, 2018).

These contents are adapted and complemented to build the Mexico Scenarios in service innovation, using two lines of analysis:

One, how the service economy is evolving with the Knowledge Society and the economic and social opportunities and threats, considering some disturbing changes in the labor process, such as robotization and artificial intelligence, which are beginning to take place.

Two, based on economic theories of innovation, certain aspects of economic problems are selected, mainly the impacts on the labor force and the population.

EXPECTED RESULTS: Some scenarios are elaborated on service innovation based on a simple / complex axis and a divergence / convergence axis. Theories on innovation are grouped into: towards unique or complementary theories; or into Segmented or fragmented theories.

Theories provide some focal points on service innovation to prevent or encourage the economic impacts of automation, robotization and artificial intelligence, and platform firms in the context of the Mexican economy.

Mr Nikolay Chichkanov

Impact of Knowledge Coproduction on Innovation in Knowledge-Intensive Business Services

OBJECTIVES: Since the introduction of the concept of knowledge-intensive business services (KIBS) in 1995 by Miles et al. (1995), these industries has attracted a lot of attention from both academic and business communities. Nowadays, KIBS are considered as both knowledge intermediaries who transfer knowledge across innovation systems and facilitate innovation processes of their clients, and as highly innovative industries themselves (Shearmur & Doloreux, 2018). One of the main features of KIBS often highlighted is the high level of collaborative relationships with their customers (Cabigiosu & Camapagnolo, 2018). However, these tight customer relationships in KIBS compared to other service industries lead not only to the coproduction of service offerings as value propositions and co-creation of value, but also to the coproduction of knowledge (Grandinetti, 2018). According to Miles (2008), such customer-related knowledge inputs are more important for those KIBS that are innovation-oriented than for those that are not focused on innovation, but the role of knowledge coproduction as an innovation driver requires more empirical evidence (Cabigiosu & Camapagnolo, 2018). This paper aims at exploring the relationship between knowledge coproduction and innovation in KIBS.

METHODOLOGY: The research model of this paper includes four groups of variables. The first one is a set of depended variables that reflect the implementation of any type innovation or the particular type of innovation in KIBS enterprise. The second group focuses on KIBS innovation drivers that are found to have a significant impact on KIBS innovation in such previous studies on Russian KIBS as Chichkanov et al. (2019). These key innovation drivers include the assessment of human capital, access to a wide knowledge network, advertising expenditures and the level of output standardization. The third group of variables represents KIBS enterprises' self-based assessment of knowledge coproduction with their customers. The final group relates to a set of control variables like company size, age or industry. The model is tested using logistic regressions on a dataset of the KIBS survey results collected in Russia in 2015.

EXPECTED RESULTS: The empirical results support the hypothesis about the positive impact caused by knowledge coproduction on the implementation of innovation in KIBS. Involving their customers in knowledge coproduction allows KIBS to develop unique innovation inputs by combining their professional expertise with industryspecific knowledge (especially tacit one) provided by their customers (Jouny-Rivier & Ngobo, 2016; Kohtamaki & Rajala, 2016). These unique combinations of knowledge developed or coproduced during interactions between KIBS providers and their customers increase not only client innovation activities (as usually highlighted in KIBS research literature), but also innovation activities of KIBS enterprises themselves. The findings of this paper contribute to the better understanding of knowledge coproduction and its impact on innovation and KIBS. These results may be useful for KIBS innovation managers who may try to enhance innovation activity by developing client relationship strategies focused on knowledge coproduction.

Clasroom #4 Services workforce and robotization

Dr Marialuisa Marzullo, Dr Adriana Carotenuto

Artificial Intelligence and Machine Learnig: Holobotics Experience Model

OBJECTIVES: Artifical Intelligence and Machine Learning technologies are changing how individuals, firms and organizations function and the people's way to live, learn, work and spend time. Artifical Intelligence and Machine Learning systems are cognitive technologies. In Artificial Intelligence, Machine Learning can be defined as the capability of an AI system to improve its performance over a period of time. This, of course, assumes the capability of the system to acquire new knowledge and skills as well as its capability to reorganize the existing knowledge based on the newly acquired knowledge (Saloky, T., & Šeminský, J., 2005).

The opportunities and challenges that digital organizations must face in reference to AI and Machine Learning are huge. Relations between the users of new technologies based on AI and Machine Learning change, creating an experience in the use of goods and services.

According to Kirsh and Maglio (1994), cognitive computing is a continuously evolving process that relates present perceptions via internal states to potential further perceptions and actions. Customers increasingly orchestrate their experiences and everyday activities with the support of technology (Heinonen et al., 2010). AI and Machine Learning will revolutionise the way we've been looking at the customer journey over the last years, how we gain information and interact with customers, and may even become the face of our organization or brand. In particular, the use of combined robotics at Artifical Intelligence and Machine Learning is one of the advanced and natural interactions between information, experiences and new ways of enjoying activities and services coded in the new term of Holobotics. Humanoid robotics fills the gap of physical and digital world: combining them within a new emotional digital ecosystem. The aim of this paper is to understand and analyse how users can change their experience and value co-creation through Humanoid robotics, using two technologies such as artificial intelligence and machine learning

METHODOLOGY: The research will be a focus on Holobotics experience model. The analysis methodology selected according to the goals is "Action Research" (Gummesson, 2003), designed to implement a problem-solving process by people working as a part of "community of practices" to improve their way of dealing questions and to solving problems. The paper adopts a case theory method useful to analyzing important social phenomena and their impacts (Gummesson, 2017). Case studies are useful methods when verifying or expanding well-known theories or challenging a specific theory (Han and Park, 2017). We carried out an Internet search by using certain keywords (e.g. Artificial Intelligence, Machine Learning, Robotics etc…), to find and select information-rich case studies (Piekkari et al., 2010). Data are collected from different and multiple sources. Blogs and social networks, specialized journals, conferences and other online sources, official reports or communications released by national and supranational institutions on their official websites, and other sources available online.

EXPECTED RESULTS: Humanoid robots offer a new way of interacting between retailer and consumer with: emotion, empathy and pertinence. They track, monitor, store, and share data on consumer needs and preferences by taking a major role not only in decision making, also in reducing time and cost. Machine learning has already grown into a widespread research field devoted to the seeking of new learning methods and/or learning algorithms, as well as their implementations.

Few studies cover the impact of Artifical Intelligence and Machine Learning in the complex interactions along the customer journey. The main research debate still regards technical feasibility and use and it is, therefore, necessary to study new dispositions of the service enabled by Artifical Intelligence and Machine Learning.

Ms Jurga Vesterte, Prof Ilona Skackauskiene

Exploring the methodological potential for decisionmaking in service modularization planning

OBJECTIVES: The breakthroughs in technology transform the nowadays service systems making them more efficient and introducing radical changes in customer experience. The straight path for the acceleration of technology adoption is through service standardization. However, service providers must deliver services in a way that increases customer satisfaction, e.g. customizing service for specific needs and wishes. Therefore, service organizations encounter paradoxical choices: they want to increase productivity by standardizing services and adopting technologies but, at the same time, keep customers satisfied by meeting customized requests. Also, advanced technologies make a statement being able to effectively deal with the variety introduced by the customer in the service delivery. Though, the substantial acquisition costs of these technologies and uncertainty about their effects on customer experience ask for attentive cost-benefit analysis versus competent service personnel who can effectively manage exceptional situations in service delivery. Management literature proposes several strategic approaches for balancing the abovementioned paradoxical choices between service productivity and customer satisfaction. One of them contains the service modularization approach which attains a kind of equilibrium between service standardization and variety of options. However, studies on decision-making regarding service modularization planning remain silent. This research addresses this gap and explores the opportunities to create the decision-support model for service organizations what strategically evaluates their options for service modularization.

METHODOLOGY: The paper integrates relevant management literature to develop a framework on the potential avenues to create a decision-support model that assists in service modularization planning. The research proceeds with literature evidence from the peer-reviewed and grey literature. It focuses on reviewing research articles that had specifically developed frameworks on planning and decision-making for successful service modularization.

EXPECTED RESULTS: The study is exploratory. It presents and classifies the methodological potential for decisionmaking that is related to service modularization planning and builds a basement for further research in creating a decision-support model.

14:00-15:30 h. Parallel Sessions II

Clasroom #1 New services – New jobs

Prof Ida Gremyr, Dr Frida Smith, Prof Mattias Elg, Dr Erik Eriksson, Prof Árni Halldórsson, Dr Susanne Gustavsson

New roles in healthcare services resulting from increased patient involvement

OBJECTIVES: In healthcare services, it has been argued that a changed way of involving patients in Quality Improvements might lead to new roles for staff as well as for patients. This shift is assumingly affecting the power relationships between patients and healthcare staffs, as well as also challenging the roles of the service providers. The purpose of this paper is to investigate if a higher degree of involvement of the patient in Quality Improvements leads to a strengthened patient role, and if a higher degree of involvement has an effect on the power relationship between healthcare staff and patients. Further, it is investigated if the healthcare staffs' earlier experiences of working in projects with patient involvement has a moderating effect on the effect of patient involvement on the patient role.

Two research questions were formulated: is there a relationship between patient involvement in Quality Improvements and a strengthened role for the patient; and are staffs' experiences in the area of improvement knowledge a moderator on the relationship between patient involvement and a strengthened patient role?

METHODOLOGY: A questionnaire including 44 questions was developed to capture experiences from involving patients in improvement projects. The questions included information of the respondent's background, experiences of facilitating improvement projects, organization and context, results, and individual experiences of patient involvement projects. A pilot questionnaire was tested in a focus group including five healthcare professionals from different healthcare organizations', everyone had undergone courses in improvement knowledge.

The survey was conducted using a web-based survey tool. The sample included respondents currently, or previously, working with improvement projects. The original sample was based on list of 472 participants in courses in improvement knowledge in three Swedish regions; we further used a snowball sampling where respondents in the original sample provided e-mail addresses to 19 additional respondents. Totally 491 questionnaires were administrated. Totally, 155 respondents completed the questionnaire, which gives a response rate of 32 %.

EXPECTED RESULTS: A strengthened patient role is correlated to the outputs from improvement projects in terms of how radical the ways of working are changed. Further, the degree of patient involvement is a means of strengthening the patient role and supporting a more equal power relationship between patients and healthcare professionals. Further, the healthcare staffs' experiences in the area of improvement knowledge moderates the effect of degree of patient involvement on a strengthened patient role and a more equal power relationship.

Ms Ane Bast, Dr Marit Engen, Dr Maria Røhnebæk

Transforming and Cocreating Dementia care

OBJECTIVES: Demographic changes with aging populations create challenges and pressure on public health care services in many western welfare states. People live longer lives due to healthier lifestyles and advances in medical treatments, but heightened life expectancies imply increased number of people suffering from cognitive impairments and dementia. As a response, there are emerging interests and awareness around new forms of treatments and caring services that are better suited to meet the complexities of dementia diseases (Moser, 2010; 2011). This may involve exploration and implementation of new forms of non-drug therapies, such as various forms of recreation and milieu treatment (Gräsel et al., 2003). However, there are also examples of more profound transformations of service systems that provide dementia care (e.g. Jenkins & Smythe, 2013). Such transformations entail efforts to create more 'homely' environments through the interior and surroundings, and to provide easier access to activities, recreation and socializing. These transformations are closely interlinked with new expectations regarding the roles, mind-sets, professional expertise and caring practices of service employees.

This paper presents findings from a process study that closely follow efforts to transform a service system in line with 'new' ideals for dementia care as outlined above.

The study is part of a broader research project carried out over four years (2018-2022), following the planning, development and implementation of a 'Dementia village' in Norway. In this paper we focus on the initial, planning stages of the transformations, and we aim to map and analyse how the Dementia village is cocreated with users (patients/potential residents and close to kin) and other stakeholders (Voorberg et al, 2015). The project adopts design thinking and service design methods to involve and cocreate the new services. The main objective of the paper is to analyse the premises of cocreation with vulnerable users that have limited ability to clearly voice their needs and preferences.

METHODOLOGY: The analysis draws on empirical material from the data collection carried out during the first period of the research project, during the fall of 2018 and spring of 2019. Methods used in this period are document studies, observations and interviews. In total 11 interviews are conducted. The members of the project development team were interviewed (6), in addition to both political (2) and administrative leaders (4) in the municipality. The interviews were semi-structured and focused on the informants understandings of the concept of the Dementia village, and their perceptions of the development processes of the new services. The interviews lasted between 1 and 1,5 hours. The observation data cover mainly service design processes carried out to plan and design the new services. Three different design workshops, all with different objectives, participants and duration, are part of the observation data. In addition, a broad set of political- and administrative steering documents are collected.

EXPECTED RESULTS: Involving vulnerable users in cocreation of new services can be seen as highly important, but at the same time problematic for various reasons. Cocreation entail ideas of power shifts, which is hard to realize in practice (Donetto et al., 2015). Thus, cocreation with vulnerable users may require different kinds of strategies and methods than those applicable in other service contexts (Dietrich et al., 2017). The paper will present results which contribute with knowledge in this regard, by identifying how vulnerable users may have a role in cocreating dementia care, directly and indirectly. The findings point to pitfalls and challenges in the processes, but prospects and potential of cocreation with users with cognitive impairment is also outlined and discussed.

Mr Jose Luis Navarro Espigares

Workforce Trends in Health Care Services

OBJECTIVES: The debate on the digital economy and automation is frequently focused on the reduction of workers and the increase of productivity. Those who are more optimistic believe that automation will raise the average level of human wellbeing. In their view, artificial intelligence and digitalisation will offer humankind emancipation from work. It also could contribute to a more affluent society, in which people live longer and enjoy a broader panorama of active leisure.

On the other hand, automation is regarded as a threat to the labour market because, given the existing wage-labour framework, it might generate greater income inequalities between highly educated "knowledge workers" and the rest of the population.

Nonetheless, the potential impact of digitalisation on improvement of healthcare systems is also highlighted by many analysts, although many studies have found only modest gains in terms of higher care quality, greater efficiency, or better patient outcomes.

In this work, we will analyse the current trend of employment in the healthcare services and whether the recent progress of digitalisation in medical processes correlates with a loss of jobs in this sector.

METHODOLOGY: The development of this work includes three different stages. The first stage consists in reviewing the literature on potential benefits of digitalisation in the healthcare sector. This part includes a brief description of some actual experiences.

In a second stage, a time trend analysis will be carried out which deals with employment and implementation of new technologies at a regional, national, and international level. To perform the analysis of time series we have used data from different sources depending on the geographical scope of the analysis. First, for the international analysis, data from the OECD (Health Database) were used; Secondly, for the national analysis we have utilised the data published by the Ministry of Health of Spain; finally, for the regional analysis, data published by the Andalusian Health Service were used.

Lastly, to study the influence of workforce in technical efficiency, a data envelopment analysis model, with hospital data, will be designed.

EXPECTED RESULTS: Preliminary results show that there is no evidence to support the reduction of employment in the healthcare sector at any level of analysis –regional, national or international. No type of substitution of workers by new technologies seems to be confirmed in our study.

Still, some expected positive impacts of precision medicine have not been evaluated yet. Benefits derived from digitalisation in healthcare services perhaps better accord with new theories based on customer experiences than with the traditional ones based on productivity improvements.

Clasroom #2 Services activities and economic development

Dr Benoît Desmarchelier, Prof Faridah Djellal, Prof Faïz Gallouj

Innovation in Public Services in the Light of Public Administration Paradigms and Service Innovation Perspectives

OBJECTIVES: "Service studies" and "public service studies" are two important and prolific fields of research, which have developed separately with limited interaction. Indeed, "service studies" are above all "market service studies", which developed in the field of economics and management (especially marketing), seeking to understand the specificities of market service compared with manufacturing goods. "Public service studies", which developed in the field of political science and public management, have focused on the non-market (or public) aspect of public services, long neglecting the service dimension of these activities. One could say that these are above all "non-market studies".

This paper is an attempt to establish a dialogue about service production and innovation their nature and their modes of organization) among the three paradigms of public administration (Traditional Public Administration-TPA, New Public Management-NPM, New Public Governance-NPG) and the three analytical perspectives used in service studies (Assimilation-A, Demarcation-D, Integration-I).

METHODOLOGY: The paper is mainly theoretical, based on a survey of the relevant literature.

EXPECTED RESULTS: We expect to establish a convergence (regarding the nature of innovation and its modes of organization) between the shift in public administration paradigms (from TPA to NPM and then to NPG) and the shift in service innovation perspectives (from A to D and then to I). After all, whether their analytical focus is on production processes or innovation dynamics, the three paradigms of public administration can be described in terms of assimilation, demarcation or integration perspectives.

Thus, in the traditional public administration paradigm, the reference is not services, but goods. The purpose is to produce homogeneous quasi-products, by using technical systems and rationalizing production processes. This paradigm falls within the scope of an (industrialist) assimilation perspective. In the new public management paradigm, it is still not the service as such which is the reference, but the market good. Production processes as well as innovation processes do not fall within the scope of a demarcation perspective, but still of an (industrial and market) assimilation perspective. Finally, in the new public governance paradigm, the reference is the service. "Public service studies" here are explicitly based on service theory, in particular SDL (Vargo and Lusch 2004). They first fall within the scope of an integrative perspective, and secondly within the scope of a demarcation perspective emphasizing the specificities of public services vis-à-vis general SDL. In both cases, the reference to service theory introduces a broad and open concept of innovation that covers technological aspects as well as a wide variety of non-technological aspects of innovation. It also introduces an interactive and open concept of the dynamics of production and innovation, centred on multi-agent networks, in which the user/citizen occupies or is urged to occupy an essential place as co-producer, co-innovator and ultimately co-creator of value.

Mr Gard Ringen Høibjerg

The Use and Abuse of Vegetational Concepts and Terms Revisited: Rethinking Service Systems and Service Ecosystems

OBJECTIVES: The paper aims to reconfigure the current notion of the service ecosystem as an analytical concept developed in recent service literature. The article revisits Arthur Tansley's (1935)article 'The use and abuse of vegetational concepts and terms' with the aim of comparing the original aspects that defined ecosystems with the current definitions on service ecosystems as they are found in recent literature, in particular within the stream of research known as service dominant logic (Akaka & Vargo, 2015; Fujita, Vaughan, & Vargo, 2019; Vargo & Akaka, 2012). Through the article, I argue for a reconfiguration of the service ecosystem concept as something which encompass service systems, wherein service systems are defined through sets of institutions that holds actors and entities in the service ecosystem. As such, the service systems then comprise one of several potential configurations within the larger service ecosystem.

The purpose of this paper is to emphasize the inherent potential that surrounds service systems through carefully reviewing its position within a service ecosystem. By recognizing the position of a particular service system within a larger service ecosystem, I argue that organizations can better adapt within the larger system and foster better solutions for their services through co-operating with external actors.

METHODOLOGY: The empirical data presented in this paper stems from seven months of intensive fieldwork in the refugee related services in four rural municipalities in Norway. The fieldwork primarily occurred in close cooperation with the local refugee related services – i.e. the refugee administration services and adult education centers – where I followed their everyday practices. I conducted participant observation and was granted access to meetings, classrooms and meeting within the particular organizations and between organizations. The fieldwork produced processual data on the everyday operations of a public service organization and on the dynamics it had with both its users and proxies. In addition to ethnographic data produced through participant observation, I conducted formal interviews and engaged in informal conversation with employees, users and proxies (e.g. people from voluntary organizations or work agencies).

EXPECTED RESULTS: Through the paper, I find the current articulation of service ecosystem as a system bound by institutions (Akaka & Vargo, 2015, p. 457) fails to capture the latent resources and actors that exist surrounding service systems. Rather than focusing on institutionalization as the thing that binds service ecosystems together, I re-introduce a definition of ecosystems more similar to that found in ecology and argue that the institutionalized parts of the service ecosystem should be considered formalized service systems. This opens a new space for practitioners and scholars to take into consideration the latent resources that exists surround such service systems, and thus invite them to consider which parts of this system can be used to improve their service. By doing so, I argue, the service ecosystem approach can be used as a tool for public and private service organizations to engage in innovative practices with actors that exists within the realm of a surrounding service ecosystem through new organizational practices and institutionalizing relationships.

Prof Jose Maria Biedma, Prof Christian Bourret, Dr Nathalie Fabry, Dr Sylvain Zeghni

Data Use Issues in the Health and Tourism Interfaces as New Services

CONTEXT AND OBJECTIVES: Health tourism is a fast-growing industry (Porras, 2013, Fetscherin & Stephano, 2016) and it is an emerging concern for countries such as France and Spain. Both are long run high ranking host countries for international visitors in cultural, leisure and meeting & event tourism. Both seek to develop heath tourism and cooperate within the European Union in health mainly on ICTs uses.

As Figuerola (2017) stress, Health tourism is a mean to escape from tourism seasonality. Health tourism is seeking for strong definition. It is seen as a situation where patients voluntarily cross international borders for treatment (Health Tourism Declaration, 2018). The World Medical Association calls on governments to examine the full impact of health tourism on a country's health care system by developing comprehensive and coordinated protocols and legislation for health tourism, in consultation and cooperation with all relevant stakeholders. These protocols should assess the possibility of agreeing on the necessary procedures and avoiding negative impacts on the country's health system. The issue of the protection of personal data of health tourists arriving from other countries with specific medical histories is a new and essential issue, particularly with the GDPR (General Data Protection Regulation).

As far as tourism is concerned, Canada is the top medical destination, followed by the UK and Israel. Spain ranks 15th according to the health tourism index developed by Fetscherin and Stephano (2016). Spain has experience in tourism medicine (sick tourists and treated in health centers) and its health infrastructures are of high quality according to the World Economic Forum (2015) Tourism Competitiveness Report. Health tourism improves the supply of health care in terms of innovation, investment in technology and talents. However, health tourism involves the management of international patients in public centers under the application of the EU Directive 2011/24/EU on cross-border healthcare. France is struggling to position in this market.

There is also another dimension of the relationship between tourism and health: that of tourists who fall ill or are victims of accidents during their trip abroad. Health is not their first motivation for travel.

In a first point we will make a survey of academic literature and then develop a typology of tourism driven by health concerns. We will make a clear distinction between health tourism, medical tourism and wellness tourism. Moreover, we will try to better specify the interactions between Tourism and Health, in particular by stressing on the medical well-being of tourists experiencing medical problems during their trips. We will particularly stress the importance of the existing tools (European Health Insurance Card) and their limitations, and the challenges of data sharing and interoperability with regard to the various legislations.

METHODOLOGY: We will start with a review of the literature and a text analyze which will be complemented by interviews with recognised actors in the tourism and health sectors through co-operations in Tourism and Healthcare sectors.

We will also try to support us in concrete situations, particularly in the context of the Compostela Ways.

EXPECTED RESULTS: We will propose a typology of different people concerned and different situations of interactions between activities in both fields of tourism and health.

We will highlight the challenges and constraints of these frontier situations in terms of data sharing and the use of new socio-technical devices, particularly at European level (interoperability issues of systems and data).

We will also emphasize the importance of this issue for the sustainable development of territories, particularly in terms of attractiveness, smart cities and territories with the whole health dimension of smart cities and connected territories.

Clasroom #3 Geographical aspects of services

Prof Metka Stare, Prof Andreja Jaklic, Mr Klemen Knez

Is international trade in services changing the position of CEECs in GVC?

OBJECTIVES: A large portion of the international trade of Central and Eastern European countries (CEECs) passes through global value chains (GVCs). In the fragmentation process of value chains the exporters from these countries are usually located farther "downstream" than the exporters from the EU15 (ECB Bulletin, 2013, Koopman et al., 2010). The data show that CEECs have primarily assumed the role of near-shoring locations in GVCs of manufacturing firms from advanced European economies. In the period 1995–2007 vertical specialisation, defined as the foreign value-added content of exports, increased in all EU economies, however the most in CEECs (Leitner, Stehrer, 2014). While services are recognized to play an important role in value added of exports in the whole EC the characteristics of increased interlinkages between manufacturing and services in GVCs are not yet sufficiently explored.

In this context the objectives of the paper are:

- To analyze the evolution of domestic and foreign services in value added exports in general, and particularly in manufacturing exports of the EU member states in the period 2000-2014.
- To assess the length of domestic and global value chains and relative position of EU member states sectors in GVCs, focusing on differences between services and manufacturing industries.
- To identify the patterns and evolution of these indicators in in the observed period, and uncover differences between EU15 and CEECs.

METHODOLOGY:

- The analysis is based on World Input-Output Database (WIOD, 2016 edition) that comprises 43 countries (plus Rest of the World) and 56 sectors.
- Input output methodology is used to identify the average relative position of sectors in GVCs across EU countries by determining total length of GVCs and presenting an index of relative position of each sector (between 0 and 1) in the chain. We evaluate international and domestic value chain length and their relative position in order to compare service and manufacturing sectors in CEECs and EU15.
- We use selected indicators (i.e. services share and manufacturing share in value added of gross export, services share in total value added of manufacturing exports) to depict and analyse the

changes in these indicators through time, and outline the patterns for the EU, EU15 and the CEECs.

EXPECTED RESULTS: While the analysis is expected to illustrate increased integration of services in the manufacturing export of the EU member states in the observed period it may be anticipated that foreign component of services value added is the main driver of such development due to ongoing internationalization. We assume that this characteristic may be less noticeable for EU15 than for CEECs that are lagging behind EU15 in services development.

In general, services are part of shorter length value chains compared to manufacturing nonetheless we expect a decline of this difference in time, which could be attributed to increasing exports of final market services, as well as of the integration of services value added in manufacturing industries. We conjecture to detect a different relative position of manufacturing and service sectors when comparing CEECs and EU15 members.

The analysis results in new empirical evidence on the role of services in GVCs of EU member states, on differences in trends between EU15 and CEECs, and on the evolution of the interactions between services and manufacturing in GVCs. The findings bear various implications for public policy and companies' management and could assisst in improving policy design towards fostering services development and service internationalisation.

Prof José Aureliano Martin & Alejandro Ramírez

Cross-Border Trade from Ceuta to Morocco. Analysis of its Impact on the Local Economy

OBJECTIVES: For the year 2010, a major tariff disarmament was envisaged in Morocco, which would liberalize its trade and would lead to a price reduction in certain products which, nowadays, are still being acquired in Ceuta. This tariff disarmament should have been completed in 2012

One of the objectives of this work would be to analyse the economic impact of this Moroccan tariff disarmament on the economy of Ceuta.

A first phase of this study was completed in 2010, with the publication of a study titled "Impact of Morocco's tariff disarmament on Ceuta. A methodological analysis proposal", which analyzed a historical series of imports of products from Ceuta from 1998 to 2007.

A second phase of study has now been initiated, adding data from imports of products up to 2018, which further strengthen the statistical estimates.

What is intended now is to re-estimate the initial econometric model in order to check whether the forecasts in it contained were accurate, and thus corroborate their results.

METHODOLOGY: To do the above, a quantitative method of estimation was designed based on the methodology of the classic models of general equilibrium and a data panel constructed by creating 56 groups of consumer products. It compared the differences with Spain's average imports from Ceuta and it also covered the same time series of data from 1998 to 2007. The results were then analysed in relation to the relative prices and VA of Ceuta and the GDP of Morocco. Subsequently, the VA of Ceuta was compared to those imports and to the GDP of Morocco. All this was done through an econometric model of simultaneous equations with panel data.

With the new data incorporated, the estimation on these models will be replicated in order to confirm if the predictions of the initial model were correct and thus corroborate the established knowledge in the economic theory on models of general equilibrium.

EXPECTED RESULTS: The results obtained in the first study confirmed that Morocco's tariff disarmament would exert a significant influence on the evolution of Ceuta's local economy through the reduction of imports, although this was compensated through the influence of the economic growth of this country in the economy of Ceuta, via tourist visits and other activities.

In view of this situation, it was proposed -as viable way to stop the continued deterioration of its economic model- to equip Ceuta with the advantages of an outermost region and, on the other hand, it was recognised its peculiarity of appearing linked to the economic development of an emerging country, despite belonging to the EU.

What we expect from the current research, which is already very advanced, is to confirm these results.

Dr Ingrid Fasshauer

Living lab, a device for "smart" rural territories?

OBJECTIVES: "Smart City" is now a well known concept consisting in collecting data in order to rationalize urban policies and to improve the life of the cities inhabitants. Pushed by European policies and fundings since

2006, living labs are implemented aiming to integrate citizens to co-produce urbanistic innovations together with public authorities and private enterprises. Initially very focused on technological innovation, then on subjects such as health and smart cities, living labs are more and more considered in relation to social innovation (Edwards-Schachter and al. 2012, Hillgren and al., 2011). They thus can act as change catalysts, especially for rural and regional development (Schaffers and al., 2008).

Some research has shown that, in rural areas, living labs can give birth to new forms of entrepreneurship centered on the territory (Fasshauer and Zadra-Veil, 2016), they nevertheless suffer from fragile business models (Schaffers and al., 2007).

The objective of the paper is to study the ability of rural living labs to influence public policies and to enhance the proposition of new services.

METHODOLOGY: To study the capacity of a living lab to influence public policies and to contribute to the proposition of innovative services, we chose to make a case-study of a living-lab located in the east of the Paris area. It aims to take benefit of digital technologies to contribute to the development of a rural territory which is far from the economic and cultural centers. Created in 2010, labeled ENoLL(European Network of Living Labs) in 2012, it has developed numerous projects. It is one of the few French living labs dedicated to territorial development in rural areas and above all it presents the specificity of being a citizen initiative whereas most French living labs are at the initiative of companies or institutions.

The collected data comes from participant observation sequences, a set of 15 interviews and the analysis of documents produced by the actors of the living lab.

The different elements were coded on Nvivo by following an inductive approach. The restitution leaves a large place to the description which makes it possible to respect the initiatives and the speech of the actors (Latour, 1987).

EXPECTED RESULTS: The case study shows that the living lab is able to create new relationships between public authorities and citizens at the scale of a rural territory.

New private and public services are created according to two different dynamics:

1. The living lab serves to test national devices and adopt them to rural areas
2. The living lab empowers local actors to create innovative services adapted to the specificities of the population living on the territory

These dynamics are not independent from each other. On the contrary the combination of these two dynamics creates a virtuous circle where local actors interact with national or even international actors or organizations.

Compared to the "smart city", the main characteristic of the smart rural territory is not related to data collection but to the development of numerous social relations between citizens, public authorities and enterprises inside and outside the territory.

What matters is the capacity of the structure to create favorable conditions for exchange and conviviality (Burret, 2017).

Clasroom #4 Services workforce and robotization

Ms Veronika Belousova, Ms Dzhamilya Abuzyarova, Ms Zhaklin Krayushkina, Ms Yulia Lonshcikova, Ms Ekaterina Nikiforova, Mr Nikolay Chichkanov

A Reinforced Role of Human Capital for Science, Technology and Innovation

OBJECTIVES: Innovations driven by new technological advances in knowledge economies [OECD, 2017] require very high level of skills and competences of employees involved in their development [Karnouskos, 2017]. In this regard, such highly qualified employees play a central role at the modern labor market [Burmann et al., 2018].

At the same time, the labor market itself is also changing due to digitalization. According to the employers, 42% of the current skills will be outdated by 2022 due to the development of new technologies and company's business models [WEF, 2018]. Therefore, in order to increase the value of continuing professional development initiatives in such a rapidly changing labor market, the employees need to constantly work on the development of their own human capital.

The goal of the following study is to determine the role of human capital in the professional development of young professionals in the field of science, technology and innovation (STI).

METHODOLOGY: The research methodology is based on the qualitative assessment of the elements of the global human capital index designed by the World Economic Forum [WEF, 2017]. According to the WEF index, the skills, which can be considered as "dynamic assets" developing over time (not innate talents), are related to the human capital. The following index consists of the four subindexes (Capacity, Deployment, Development and Know-how), reflecting the level of human potential, degree of its application, development and possession of specific skills and competencies, respectively.

The object of this study is a specific master's program focused on both management and governance in the field of science, technology and innovation, the graduates of this program become the subject. The respondent's selection criteria are included the graduation year and the career path. We use the results of 16 semi-structured interviews with 2016-2018 graduates representing different career tracks: corporate sector (8 respondents), research centers (5 respondents), entrepreneurs (2 respondents) and government body (1 respondent). This number of respondents allows us to take into account the variability of the cases minimizing the repetitive information [Kvale, 2008]. It is worth noting that four respondents are the foreign graduates of the program.

EXPECTED RESULTS: The research results provide the assessment of four subindexes of the WEF index by the respondents. For the Capacity element, the respondents assign a high value to the formal education, but assess the roles of bachelor's and master's degrees differently. The former provides a theoretical and practical "base", while the latter develops competencies in a deeper and more focused than the former. For the Deployment component, the graduates note the practical usefulness of foresight methods in analyzing and predicting market changes. Such skills as teamwork, intercultural sensitivity, stress resistance, critical thinking and self-organization are also practically valuable. For the Development element, the respondents highlight the huge role of the advanced further training for the human capital development. The most popular way of continuing education is online education. Finally, for the Know-how component, such skills as social intelligence, emotional intelligence and digital skills are determined as the most crucial ones for the field of science, technology and innovation. In general, regardless of the career track, graduates highlight the importance of forming a dynamic learning environment in research based program.

Dr Takeshi Takenaka

Re-design of service systems based on employee satisfaction, customer satisfaction and labour productivity

OBJECTIVES: In many countries, labour-intensive service industries such as food, hotel, retail, or nursing care services are strongly required to improve their productivity to cope with labour shortage, price competition and global surge in price of natural resources. However, good services could be realized and maintained by customers and employees with their satisfactions. In other words, service providers should re-design their service models to simultaneously increase or maintain labour productivity, employee satisfaction (ES) and customer satisfaction (CS) in an aging society.

In this study, we analyse existing services by using standardized indicators on ES, CS, and labour productivity. The aim of this study is to seek service eco-systems to simultaneously realize appropriate values for customers, employees and service providers. For this purpose, a computational service model is created based on actual data from game theoretic viewpoint.

As a case study, appropriate labour productivity ranges of a Japanese restaurant chain. Based on results, we discuss possible service models of a restaurant chain for sustainable society.

METHODOLOGY: The authors have developed an ES questionnaire survey method by using approx. 100,000 employee data in Japan. In this method, ES is evaluated by using normalized scores of 5 factors of ES: Leadership, Team Capability, Hospitality, Job autonomy, and Job Satisfaction. On the other hand, hundreds of thousands of CS have been investigated with the mystery shoppers program by the same Japanese consulting company.

By using those data, the structure of ES and CS are investigated to find important factors for ES and CS. Then relationships among ES, CS are analysed over 100 companies.

As a case study, the relationships among productivity indicators including sales per employee per hour or customer numbers per employees, and ES and CS indicators are analysed with the data of a Japanese restaurant chain which has over 200 shops.

With a constructed model, we calculate adequate ranges of labour productivity considering CS and ES levels.

EXPECTED RESULTS: Service-profit chain theory proposed by Heskett et al., in 1994 is a well-known model showing that increased employee satisfaction positively affects consumer satisfaction, eventually improving company profitability. Through our previous researches by using standardized ES and CS survey methods, we found positive relationships between some indicators of ES and CS. For example, with 48 Japanese restaurant companies survey, the score on hospitality for customers in ES has positive correlation with the score on intention of repeat in CS. Additionally, employee's job autonomy could be enhanced by customer satisfaction. However, relationships among profitability or productivity of companies, ES, and CS seem to be not simple because service models of restaurants have wide variety.

Labour productivity is often evaluated by sales per labour input in actual services. However, in restaurant services, for instance, sales per labour input is also related to busyness of service provision processes. Therefore, overwork of employees could reduce employee satisfaction and could result in customers' dissatisfaction. On the other hand, customer average spent could be increased when customer satisfied with services provided by employees.

By using actual business data of a restaurant chain and constructed computational model, we re-consider the productivity mechanism of services considering ES and CS. Moreover, by comparing shops with different levels of ES or productivities, we will discuss how we can design sustainable service systems.

Dr Jørn Møller

Digitalization and Servitization in the Offshore Wind Industry

OBJECTIVES: In 2017, it became cheaper to install offshore wind power than to build new fossil-fuel based power plants, partly because of technological innovation and more giant offshore wind turbines. While bigger machines allow for higher output, the losses that arise when turbine fail are also more significant.

The wind power industry´s answer to this challenge has been to move towards a predictive and scheduled form of operations and maintenance, which means a kind of 'digitalized servitization' of the wind power industry. It has also involved building a renewable value chain made up of various components and capabilities ranging from generation of green power, through storage, transmission, and distribution to the consumption side.

This digital value creation builds on the deployment of advanced analytics and artificial intelligence, strengthening interfaces and mobility by augmenting the employees´ and customers´ experiences through human-machine interfaces, as well as a raised level of automation. It means a significant scale-up of the digital efforts, increasing external recruitment and further leveraging of in-house capabilities to stay competitive in a changed business ecosystem characterized by a zero-subsidy regime in offshore projects.

The rapid change in the digital servitization and transformation call on a new 'digital business model' (DBM) to create value for the customers and capture value to the energy companies, but also a focus on recruiting new skills to secure the dynamic capabilities of developers and operators of renewable energy resources in relation to changes in business model (Teece 2018).

The purpose of this study is therefore to show how the firm Ørsted A/S as a vital energy company has managed to make this transformation in the DBM, to comply with changes in the business eco-system (to match a zero-subsidy regime) and to develop dynamic capabilities that support integrated energy solutions based on renewable energy technologies.

METHODOLOGY: The present study of the Digitalization and Servitization in Offshore Wind is based on a review on the framing of digital business models (DBM) in the literature on digitalization and servitization in manufacturing (e.g., Martín- Peña et al. 2018, p. 95). It contains various items: 1) The critical role of the company´s digital transformation for the configuration of DBM, 2) DPM as a unit of analysis, 3) A multidisciplinary view on how companies do business in the new digital scenario, and 4) An emphasis on value networks and business eco-systems.

The impact of digitalization and servitization on the Danish energy company Ørsted A/S build on data collected from selected offshore projects and auctions in the Nord Sea area, where Ørsted A/S has been active in winning bids.

Methodological it means that the present study also has to become a study of the value chain of the offshore wind industry. The study has met this requirement by interviewing selected representatives of actors in the value chain together with representatives from the developing and operating company (Ørsted A/S).

EXPECTED RESULTS: The study is expected to contribute in various ways to the research in digital transformation and servitization of manufacturing:

Firstly, it extends the analysis of the digitalization and servitization of manufacturing and services to a new context – the production and offerings of renewable energy, and

Secondly, it also contributes to understanding the impact of a new and changed eco-business system in the energy industry characterized by zero-subsidy regimes and new institutional rules (public regulation).

Thirdly, it focuses on the crucial role of dynamic capabilities to stay competitive and innovative in the green transition from fossil-fuel energy production to renewable energy production.

Lastly, this study has some managerial implication for the organizational practice of energy companies, e.g., management should continuously examine what capabilities that are needed to operate a successful Digitalized Business Model.

16:00-17:30 h. Parallel Sessions III

Clasroom #1 New services – New jobs

Prof Magali Dubosson, Prof Emmanuel Fragniere, Prof Anne-Sylvaine Heritier, Mr Samuele Meier, Mr Charles Wainwright

A call for more socialization (SECI) to counter growing incivilities and impatience of end users through a human risk framework dedicated to front-liners

OBJECTIVES: In the service sector, front-line employees endure intense stress pressures (Miller et al., 1988). Working in a stressful environment increases the risk of suffering from physical illness and/or from psychological distress (Clarke; Cooper, 2004). Currently, it is anticipated that front-liners will be kept on board for tasks and roles that the robot cannot perform, such as empathy, solving new complex cases requiring creativity, apprehending clumsy and overloaded space. Instead of focusing on these rewarding and positive aspects, today's front-liners are increasingly suffering from the resentment and irritation of end-users, a work overload and a lack of meaning. When employees feel that they are unable to bridge a gap with the requirements or expectations placed on them, it may reduce their effectiveness at work and cause health trouble (Toderi et al., 2015). Moreover, burnout often affects the best personnel, namely the employees who are usually skillful and take the initiative (improvise) in the case of service failures (Pines et al., 1981).

Our research based on a focus group of nurses is seeking to develop an approach to better protect these front-liners from these harmful evolutions. Service companies have to be relying on their best employees to achieve their objectives. A thorough risk management approach have to consider this kind of risks. 2. Services workforce and robotization

2.3. Labour intensive services?

METHODOLOGY: A focus group gathered 10 young nurses working in Western Switzerland.

A moderator's guide had been developed to capture their feelings and insights about the human risks involved in a hospital environment where technology is becoming increasingly prevalent. The themes were addressed through the following questions:

- In the context of your job, did you observe any human-related risk?
- What would you think if your hospital starts gathering employee and team information in order to prevent human-related risks?
- Which information about you and your work environment would you be willing to communicate?
- Which incentives could make you motivated to deliver that information?

The content of the discussion was fully transcribed and analyzed.

EXPECTED RESULTS: The results revealed that health workers suffered from an overload of work that led to conflicts, decreased motivation and reduced performance. These negative effects prevent them from being more connected to their patients.

Among the most important stressors, focus group participants mentioned working hours, night shift work, lack of recognition from physicians, patients and their families, the emotional burden from being confronted to death, lack of autonomy, overload of administrative tasks. Technology does not ease any of these stressors but rather exacerbates them.

The main risk is not providing adequate patient care. In this stressful environment, the last line of defense is the team you work with, provided the work atmosphere is good. Otherwise, there's nothing left.

To ensure that the team is performing well, human risks must be managed. The focus group participants were in favor of a process of collecting personal information. They would feel listened to, taken into account and appreciated.

Transmitting personal information does not mean that they would agree to individual treatment. All information should be processed in a consolidated manner to highlight the relevant issues. The treatment should guarantee anonymity and be carried out outside the organization.

However, it is crucial that the information transmitted is actually used and that there is a follow-up in terms of the actions taken. It is necessary to give a real meaning to the approach.

However, this approach should under no circumstances add a burden in an already overloaded work environment.

Prof Magali Dubosson, Prof Emmanuel Fragniere, Dr Denis Rochat, Mr Marshall Sitten, Mr Eric Berdeaux

Developing an AI and digitization service typology to take into account the particularities of new jobs and/or organizations according to different sectors of activity: an empirical study conducted in Switzerland

OBJECTIVES: Artificial intelligence (AI) and digitization will undoubtedly change the new service professions, not to mention the new service organizations (Loebbecke and Picot, 2015). In particular, the AI will play a leading role in aspects of work related to the digitization of data analysis, interpretation, problem diagnosis and decision support. Assuming that AI is intended to support intellectual human work and not simply replace it, there can likely be no "one size fits all" application of AI to the service industry. This study seeks to understand why AI and digitization are likely to take different paths depending on the trades and organizations within the diversity of service sectors, and in what ways it is therefore crucial to take into account the human factor as a priority (Arntz et al., 2016). On this basis, we will propose a typology of future work, modified by AI and digitization, adapted to the different sectors of the service industry.

METHODOLOGY: The research is based on a qualitative survey. In 2018, we conducted 85 semi-directive interviews in the French-speaking region of Switzerland. The profiles chosen corresponded to people working in the different service sectors (banking, insurance, healthcare, education, etc.) and to different professional statuses (employees, managers, etc.).

The questionnaire was based on following questions:

- Has your work been influenced by AI and digitization? if so, do you have any examples?
- Do you think that your work will be (still) modified by AI and digitization? If so, how? If not, why will your work not be impacted by them?
- Does your company talk to you AI and digitization? If so, by what means (i.e. training, newsletter, seminars, conferences, etc.)?
- Have you observed any reorganizations following AI and digitization (merging of services, disappearance of certain departments, process changes, etc.)?

All interview transcripts were then analyzed using Nvivo software to synthesize the results. We are currently generating research hypotheses that will be confronted with the scientific literature.

EXPECTED RESULTS: The mains findings of this research are that we have observed that AI and digitization will affect futures service jobs and organization according to the specificities of the service sector taken into consideration. For the banking sector, for example, AI and digitization will focus more on being in regulatory compliance while in the medical sector, it will be more operational - having digitized patient records and thus saving time and improving efficiency.

We have already generated several hypotheses:

- Depending on the service sector, the evolution of AI and digitization will focus on different aspects of jobs as well as organizations.
- The more people perceive that they bring added value (high hierarchical rank), the more they think that the company is preparing AI and digitization for and with employees.

AI and digitization seems thus to be approached in companies from the technical and functional point of view, not from the human point of view. Based on these findings, we will propose a typology of AI and digitization that takes into account the specificities of each of the service sectors.

Clasroom #2 Services activities and economic development

Dr Céline Merlin-Brogniart

Social innovation networks, co-creation and innovation dynamics: the case of civic service projects

OBJECTIVES: The aim of this research is to analyse the innovation dynamics of multi-agent innovation networks that develop within public services or create public service. These innovation networks involve a variable number of public, non-profit and private agents, in order to co-produce social innovation. This research has been carried out within the H2020 research project Co-VAL' ('Understanding value co-creation in public services for transforming European public administrations).

If the innovation dynamic of non-technological innovation (and social innovation), have long remained marginal in the field of innovation studies, this innovation gap has been partly filled with studies with a specific focus on services (Gallouj, Djellal, 2015), and more recently, with studies taking into account the innovation dynamics in public services (Osborne and Brown, 2013, Desmarchelier et al, 2018). Public Service Innovation Networks for Social Innovation (PSINSIs) still remain poorly explored. Several literatures refer to the case of PSINSIs (RichezBattesti et al., 2012, Gallois et al., 2016), but there is currently no synthesis of these studies. PSINSIs are often only studied from one theoritical perspective and not as a whole.

The innovation dynamics of PSINSIs are significantly different from those of traditional innovation networks: PSINSIs needs the coproduction of each agent to produce social innovation (public, third sector, potentially private actors) including the recipients of the service. The role of the third sector is significant to the development of these social innovations. The participation of public actors may be necessary to the development of the network. Within PSINSIs, civic service projects are interesting methods of reconnecting people and including discriminated population.

METHODOLOGY: An in-depth qualitative study of two local experiments was carried out. That study consisted of a series of on-site semi-structured interviews conducted between January and march 2019 with the different agents of each project. The interviews consisted of analyzing the role and influence of the internal and external actors on the project, the different forms of innovations created, the territorial and innovation dynamics. The case studies examined are the Booster program, and the Melting Potes program, that are two civic service projects.

EXPECTED RESULTS: These case studies highlight various forms of innovation, as well as specific PSINSIs drivers and barriers: the importance of existing territorial networks, as well as the management method (as a co-creation process) are important to implement this kind of projects. PSINSIs enables innovation dynamics with multi-faceted supports. Civic service projects reduce the human, social and economic cost of social issues. Another result is that social innovation networks facilitate the diffusion of social innovation.

Prof Liudmila Bagdoniene

Does resource scarcity encourage co-located organizations to cooperate in co-creating service innovation?

OBJECTIVES: Service innovations are ubiquitous and their role in creating growth and well-being has been increasingly acknowledged. Service organizations develop innovations, that tend to involve improvements to existing services, changes the processes, and make adjustments to employees' behaviours (Rubalcaba, 2012). In order to innovate, organizations can draw on various resources (den Hertog et al., 2010). Resources encompass all assets, capabilities, organisational processes, organization attributes, information, knowledge (Kandampully, 2002).

As service innovation resources were identified expert knowledge, diagnostic skills, facilities and professional equipment, experience, objectivity and integrity, relational capital (Aarikka-Stenroos and Jaakkola, 2012); general and confidential information, physical and ready-made resources, tacit knowledge and organizational routines (Rusanen et al., 2014); relational, informational and organizational resources (Hsieh and Hsieh, 2015); propertybased resources and knowledge-based resources (Kim et al., 2015), etc. According to Vargo and Lusch (2004), all resources can be divided into operand and operant resources (Vargo, Lusch, 2004). Service innovation relies more on operant than on operand resources (Hsieh and Hsieh, 2015). Moreover, operant resources determine the degree of service innovativeness (Michel et al., 2008). However, service organizations as small and medium enterprises (SMEs) often have limited resources. These constrains can hinder their innovation capabilities (Woschke et al., 2017). Surprisingly the role of scarce resources needed for innovation has got limited attention of researchers (Troilo et al., 2014) and it is not clear how service organizations flourish and create innovation despite the severe resource constraints they face.

The objective of this research is to explore how service organizations can overcome scarcity of innovation resources by cooperating with co-located organizations?

METHODOLOGY: The context of empirical research will be service organizations co-located in Lithuanian resort Birstonas that is one of the oldest balneology resorts in Lithuania. A case study as a qualitative methodology will be chosen to reach the research objective. The main reason for selecting this methodology is its strength to provide a contextual, in-depth understanding of the perspectives of participants (Green and Thorogood, 2013). The primary data will be gathered by a semi-structured interview with executives of service organizations. As data gathering method a semi-structured interview combines a pre-determined set of open questions with the opportunity for the interviewer to explore particular themes or responses further. The following topics will be included in the interview questionnaire: 1) what service innovations were implemented during the latter 2 years; 2) what factors stimulated or hindered service innovation in studied organizations; 3) whether a network of co-located organizations is seen as a potential source of limited innovation resources, 4) what methods allow to employ deficient resources from the network of co-located organizations.

The data will be analysed using qualitative content technique in three stages (Roller and Lavrakas, 2015). In the first stage, the codes from the interview data using literature review as a theoretical basis will be developed; in the second stage, each interview using MAXQDA12 software will be coded, and in the third stage the coding results following again the dialogue between theoretical and empirical material will be analysed and interpreted.

EXPECTED RESULTS: It is expected to uncover what type of innovation was implemented in different organizations and what types of deficient resources were used from co-located service organizations (sanatoriums, hotels, restaurants, leisure firms, etc.); how this process operated; whether the studied organizations actively used the network of colocated organizations as a potential source for overcoming scarce resources; what methods were applied to access lacking resources of co-located organizations; how the cooperation can discover the way to creating collaborative innovation. Other results depend on additional questions that will arise during semi-structured interview.

Dr Oscar Montes Pineda, Prof Faïz Gallouj, Prof Luis Rubalcaba Bermejo

Social Innovation and Educational Services

OBJECTIVES: A shift in the ways innovations in education accrue has taken place in the last decades, ranging from the adoption/implementation in the educational process of tangible or intangible innovations coming from external sources to innovations where the interrelation of education actors (teacher/learner interface), the role of users/learners and their link to the social context, seem to become the key aspects. These latter expressions (understanding) of innovations can be associated to social innovation in different meanings.

Service and social innovation share some commonalities, such as the intensive social interaction between customers, users and producers, which means that innovations are dominated by the openness and interaction (coproduction).

In this context, the aim of our research will be to understand and analyse social innovations in education from a service and service innovation perspective.

METHODOLOGY: To do so, first, building over existing literature (Gallouj and Weinstein, 1997; Gallouj, 2002; De Vries, 2006; Gallouj and Djellal, 2010; Djellal and Gallouj, 2012; Rubalcaba, 2013) we reconsider the service characteristics-based approach and introduce several changes in the initial framework in order to take into account the specificities of education services and of their innovation dynamics.

Secondly, to validate our theoretical construct, we meta-analyse a number of case studies in order to provide empirical evidence of social innovation dynamics in the educational sector, by describing novel solutions as a result of the specific contribution (interactions and co-production) of students, families, schools and local actors over new or improved educational services.

EXPECTED RESULTS: Our research shows that innovations in education services can be seen as social innovations.

As service and social innovations share some commonalities, innovations in education can be represented as a set of service and social characteristics, that deal much with novel user's roles and participation and linking context in new ways.

More empirically evidence shows that novel roles of learners, peer effects or the effective engagement of local actors, among others, become key on improving education outputs.

Clasroom #3 Geographical aspects of services

Dr Dioni Elche, Dr Ángela Martínez-Pérez, Dr. Pedro M. García-Villaverde

*S*ocial capital and market dynamism as determinants of pioneering orientation

OBJECTIVES: In a context of high growth and global competition in the tourism industry, there is a need for finer grained analysis of tourism destinations from the perspective of clusters to better understand how clustered tourism firms relate and what strategies are being developed (Zach & Hill, 2017). There is special interest in pioneering orientation in the context of tourism clusters because the positive externalities that emerge in these agglomerations can foster first-mover advantages. Despite the interest in these topics, there is scant literature connecting tourism clusters and entry timing. Such a gap motivates this study.

This study focuses on antecedents of pioneer orientation considering both relational factors, through the approach of social capital –closed ties and diverse ties, and environmental factors, analysing market dynamism. First, this paper analyses the existence of a curvilinear U-shaped relationship between market dynamism and pioneering orientation. Afterwards the moderating role of closed ties and diverse ties are analysed in the U-shaped relationship between market dynamism and pioneering orientation.

METHODOLOGY: We use original data on a sample of 215 firms. The empirical analysis focuses on the tourism industry, specifically in Spanish historical cities recognized as UNESCO World Heritage Cities, which have been identified as tourism clusters in previous studies (Martínez-Pérez, García-Villaverde & Elche, 2016).

EXPECTED RESULTS: The results confirm a curvilinear U-shaped relationship between market dynamism and pioneering orientation. Moreover, the findings show divergent moderating roles of closed ties and diverse ties on the curvilinear U-shaped relationship between market dynamism and pioneering orientation. This relationship is accentuated by higher closed ties –positive moderation-, and is attenuated by higher diverse ties –negative moderation-.

Managers are advised to pay attention to changes in consumers' needs so as to identify first-mover opportunities. This encourages firms to develop a pioneering orientation. As clustered firms could benefit from developing social capital, managers should strengthen their closed ties, built from local agents, in order to take advantages of high market dynamism. Moreover, managers should create diverse ties, built from external agents, to access to new information and knowledge that is key to achieve of first-mover advantages.

Dr Davide Consoli, Dr Dioni Elche, Dr Mabel Sanchez-Barrioluengo

From brawn to brains: manufacturing-KIBS interdependency

OBJECTIVES: The paper analyses cross-sectoral interdependencies between manufacturing and KIBS. In so doing it addresses the following research questions:

1. Which manufacturing industries are complementary with KIBS development? Addressing this question entails a full account of cross-sectoral heterogeneity in manufacturing-KIBS interdependencies.
2. Do cross-sectoral interdependencies exhibit geographical heterogeneity? The expectation is that KIBS will locate in cities with higher density of potentially related activities and of human capital. We propose to investigate combined sectoral and spatial characteristics of manufacturing-KIBS connections.

These issues are explored through an empirical analysis of employment data of 399 municipalities in Spain over the period 1981-2011. This empirical context is of interest for various reasons. Industrialization in Spain took off in the early 1960s, after decades of autarky and later compared to other Western European countries, propelled through the 1970s by strategic plans that mandated the creation of state-owned enterprises in strategic sectors and strategic locations. Our analysis coincides with the period that followed on these premises, and that saw profound institutional, economic and social transformations. Between 1981 and 2011 the Spanish economy has gone through it all, from early industrialization, to de-industrialization and, more recently, re-industrialization, not to mention phases of booming growth and of deep recession. Against this backdrop, KIBS have gone from being negligible to absorbing as much as 20% of the overall workforce.

METHODOLOGY: We employ OLS and IV estimates to assess the local employment effect of manufacturing industries on KIBS. In particular, we follow the job multiplier literature. To address the first research question we run benchmark regressions for all KIBS sectors and all municipalities pooled together. To address the second research question we replicate the above empirical strategy by separating municipalities by population density.

EXPECTED RESULTS: The main preliminary results are as follows. Using a job multiplier technique, we find that four manufacturing industries have a positive employment effect on KIBS: two traditional supplier dominated industries – leather & footwear and wood & furniture - and two emergent science based industries – plastic & chemicals and hi-tech manufacturing. Coherent with prior literature, the results hold primarily for municipalities with higher density.

Clasroom #4 Internationalization of services and services in emerging markets

Prof Andrew Jones, Prof Patrik Ström

Service economy integration in Latin America – international connection and value chain upgrading.

OBJECTIVES: Across the globe, the increasing growth and dominance of service industries has continued in both mature and emerging economies. Furthermore, historic narratives around economic development for many emerging economies have shifted towards a service industry-led focus as their domestic industries strengthen and service industries become ever more globalized. New technologies of automation associated with Industry 4.0 are creating a wave of disruption in many service industries, the profound implications of which for the nature of service sector activity are only just beginning to be understood. Whilst service industries have globalized, in the last decade wider globalization processes have become increasingly contested.

As services will become an even larger part of the industrialized countries' economies and labour market, it is important for the Latin American countries to position their economies in such a way that they can utilize current strengths on the global market place, but more importantly, develop a stronger service economy platform for the future (Hernandez et al., 2014). The global service economy creates new possibilities to work on issues for regional value-capture and how linkages are connected across industries and geographies.

The project aims to study the possible transformation of the economy based on upgrading within or external to the region. The establishment of intra-regional trade relations prove important for the development of markets (Alvstam et al., 2016). Links with the USA and the EU also provide linkages to global value-chains. A sub-sectoral analysis provides a better understanding of how linkage of value-capture are constructed. This part of the project will engage with mechanisms and driving forces that facilitate industrial and economic transformation based on experience in other emerging markets. Hence, it aims to engage with the concept of development approach, in order for the country to escape the risk of being stuck in the middle-income trap for emerging markets.

More specifically the paper seeks to answer the following research questions:

What are the underlying mechanisms for service economy integration in Latin America?

In what areas do Latin American economies possess a competitive advantage in service economy value-chains?

METHODOLOGY: The initial research design is developed through an overall analysis of the size and interconnectedness of the Latin American service economy. The next level will more closely study a set of countries that will constitute the main empirical part of the research. The initial analysis has indicated that Columbia, Costa Rica and St. Lucia will constitute the empirical platform. Columbia represents a fairly large economy and is well positioned in relation to the other larger economies in the region. Trade relations with USA and the EU are also of interest to study. Costa Rica would be an important reference case with its small open and trade dependent economy. Additionally, it is also an important forerunner to economic integration in global value chains (Flores Saenz, 2014). St. Lucia constitutes an example of the island economies in the Caribbean. It will be used as a pilot study for building the broader research design comprising the study.

The paper works with both primary and secondary sources. Secondary sources are trade statistics and reports published by industry associations and firms. Primary data comprises interviews with policy representatives, representatives from industry associations, and finally firm executives.

EXPECTED RESULTS: The results point towards the increasing importance of the service economy in Latin America and that respective countries have different possibilities to facilitate economic integration and tap into regional and international service economy value chains. The sub-sectoral analysis will show industrial dynamics in relation to firms. The preliminary results will also help to establish in what way development processes can facilitate the upgrading of the service economy through policy support and the underlying competitive advantage of firms.

The paper seeks to contribute to theory through disentangling the service economy from the spatial perspective and conceptualize how countries are positioned in global value chains. The paper also aims through the results, to make an empirical contribution by increasing the knowledge of the service industry dynamics in Latin America and the connection to the global economy.

Dr Clara Belén Martos Martínez, Dr Marta Muñoz Guarasa

Importance of Intellectual Capital for KIS to be Born Global since its creation: Mixed Methods Approach

OBJECTIVES: The first objective will be to verify the causes that allow the KIS (Knowledge Intensive Services) to be Born Global since its foundation.

The second objective will be to address a set of strategies necessary for the KIS to become Born Global immediately upon its creation. This study aims to establish a specific theoretical framework on the behavior and characteristics that KIS companies have shown.

The third objective will be to empirically verify the validity of an internationalization model applied to the characteristics of KIS companies, through case analysis and the qualitative comparative method (QCA).

The fourth objective will be to develop a common or similar causative internationalization pattern among the comparative cases in order to show analogous behaviors among them.

METHODOLOGY: To know the causes that determine the KIS to be Born Global since its foundation, we have used the following methods:

On the one hand, we have carried out an analysis of four KIS cases, two KIS Born Global immediately to its foundation and two KIS that have been Born Global during the three years following its creation. These knowledge-intensive service companies belong to the renewable energy and consultancy sector.

To obtain the degree of rigor and quality of research we have considered aspects that have been commonly used and that are relevant for the analysis of cases such as: internal validity through personal interviews with the founders or responsible for the process of internationalization of the selected companies , as well as the realization of sensemaking and pattermatching strategies; external validity through the use of rival theories and propositions in the specific theoretical framework applied to the KIS Born Global and the realization of the individual and comparative analysis of the cases used; the reliability through the use of protocols such as the technical file of case analysis or the development of the case studies.

On the other hand, we have used a qualitative comparative analysis of fuzzy sets (fsQCA) to identify alternative configurations that lead to the KIS being Global Born immediately after its creation or not. Thus, it turns out to be an alternative method to identify different routes. The fsQCA accepts alternative configurations of conditions, equifinality and asymmetry (Fiss, 2011) that allow more than one configuration of conditions that lead for KIS to become Born Global immediately upon its creation or that will not to became.

EXPECTED RESULTS: For KIS to be Born Global immediately at its foundation they must have converted their knowledge, network and innovation resources and capacities into dynamic capabilities.

The dynamic capacities (knowledge, network and innovation) are included in the intellectual capital of the company, which consists of: human capital (values, skills and abilities of employees), organizational capital (organizational learning and organizational culture), business capital (suppliers, competing companies, services to companies, etc.) and social capital (foreign promotion agencies, international fairs, congresses, research, publications, etc.) and technological capital (technological competence, innovative culture) .

In order for the intellectual capital to achieve the dynamic capacities of knowledge, network and innovation, they must have carried out market orientation strategies (with the objective of obtaining objective knowledge of the market and the founder's experience), to the network (in order to have social and business networks) and international entrepreneurship (fulfilling the founder with the characteristics of innovation, autonomy, proactivity and proclivity and providing innovative services) when they operated from their previous company Knowledge Intensive Services.

The founders of the KIS that are Born Global immediately at birth were working together in the previous company KIS and participated in its internationalization process. In addition, the main activity of their previous company KIS in which they had worked is the same as that of the new company that has been internationalized immediately. This leads to the founders having experiential and objective knowledge of the sector, country, customers, suppliers, etc. In addition, they have business networks (contacts with other companies, suppliers, former customers, etc.) and social networks (previous participation in fairs, use of EXTENDA services, ICEX, etc.). Likewise, in the previous company, they mainly provided the same innovative services and the founders were already entrepreneurs and were clear that they wanted to be international from the beginning of the creation of the new company.

Mr Manik Batra, Udita Taneja

Perceived Service Quality and Patient Satisfaction: A Study of Hospitals in a Developing Country

OBJECTIVES: There are studies that have determined patient satisfaction as a key outcome of quality care (Donabedian, 1988; O’Connell et al., 1999). Some other studies have suggested that patient satisfaction is the most important performance metric for health-care delivery (Zabada et al., 2001; Manaf et al., 2012). “Putting it in simpler way, care cannot be high quality unless the patient is satisfied” (Vuori, 1987). Given the link between Perceived Service Quality and Patient Satisfaction, this study models Patient Satisfaction as a function of Perceived Service Quality in hospitals in India. The research objectives of this study are:

1. Determination of what constitutes Service Quality in the hospitals of the capital city of New Delhi.
2. Assessing how the key dimensions of Service Quality related to Patient Satisfaction.

METHODOLOGY: This is an exploratory study. The geographical scope is limited to the capital city of New Delhi and neighbouring towns. Qualitative interviews were done with patients and their accompanying relatives. Interviews were done with 20 individuals who had an experience with a hospital in the last two months. The first question asked was “Are you satisfied with the services of that you received?” It was followed by another openended question “What, according to you, is the ideal quality of services hospitals should provide?” The first question on Satisfaction was framed to make respondents think of all the things in the hospital which did not meet their expectations. The follow-up question covered various aspects such as theservices desired, attitude of the medical staff, competence of doctors, level of cleanliness, and behavior of the staff while demanding money for routine services in the hospital?

The initial responses collected led to the development of 22 ítems based on the SERVQUAL instrument (Andaleeb, 2001). These ítems will identify the determinants of Perceived Service Quality and its effect on Patient Satisfaction. The items related to meals and menus were dropped from our survey instrument because many respondents were not interested in this aspect and were more interested in the quality of medical services that they received. Data collected from 120 respondents will be analyzed using factor analysis for determining the dimensions of Service Quality and followed by multiple regression for hypothesis testing.

EXPECTED RESULTS: The insights of this study will be useful to hospitals in improving their Service Quality and lead to increased Patient Satisfaction. This will help hospitals to plan their strategy keeping Patient Satisfaction as an important goal.

17:30-19:00 h. Parallel Sessions IV

Clasroom #1 New services – New jobs

Dr Kenan Wassouf, Dr Noama Abbas

Les facteurs déterminants la fidélité du consommateur au système Drive : une étude appliquée à Carrefour Drive.

OBJECTIVES: Aujourd’hui, avec les développements technologiques dans un environnement concurrentiel de plus en plus fort, les entreprises se doivent de mettre le consommateur au coeur de leurs préoccupations. Après de longues années de stabilité, le secteur de la distribution est aujourd’hui mis en mouvement par de nombreuses innovations, rendues possibles, pour la plupart, par les progrès des moyens de communication et d’information. Parmi toutes ces nouveautés, l’apparition des « Drive » a retenu notre intérêt: au lieu de se rendre dans une zone commerciale et de remplir son chariot en circulant au milieu de nombreux rayons, le client peut désormais effectuer son « marché » en ligne, sans se déplacer, et quand cela lui est le plus commode. Il retirera les produits qu’il aura commandés sans avoir à faire la queue, ni à manipuler les produits ce qui représente un gain de temps considérable.

Cette évolution pose cependant question concernant le comportement du consommateur dont la fidélité sur Internet paraît beaucoup moins assurée. Avec le Drive, il évolue dans un univers « cross canal » dans lequel se mêlent des incitations qui peuvent être contradictoires: la proximité ou la commodité du point de retrait comptent certainement, mais dépendent de la densité (qui augmente) des offres concurrentes. D’un autre côté, le site de vente est en concurrence directe avec ce que proposent d’autres enseignes et le consommateur est tenté de vérifier régulièrement que le distributeur qu’il a choisi est bien celui qui offre les meilleurs prix, le meilleur choix et le site qui fonctionne le mieux. L’objectif de cette contribution est d’apporter de nouveaux éléments au concept de la fidélité du consommateur dans contexte de distribution cross-canal, mais aussi de mettre à jour la question fondamentale sous-jacente des déterminants qui contribuent à la fidélité du consommateur à un Drive. Notre recherche apporte des éléments de réponse à deux questions de recherche qui ont guidé notre démarche : Question de recherche 1 : Quel aspects sont pris en considération et évalués par le consommateur suite à une expérience d’achat et quels sont ceux qui influencent sa fidélité à un Drive ? Question de recherche 2 : Comment ces déterminants se combinent-ils pour créer la fidélité du consommateur à un Drive?

METHODOLOGY: Pour répondre aux questions de recherche mentionnées ci-dessus, nous suivons une démarche méthodologique mixte couplant des méthodes qualitatives et des méthodes quantitatives pour exploiter leurs intérêts respectifs et leur complémentarité. Plus précisément, nous avons d’abord mené une revue de la littérature tournant autour de deux champs de recherche (le comportement cross-canal et la fidélité du consommateur). Elle a été combinée à une étude qualitative exploratoire (entretiens approfondis réalisés auprès de consommateurs). Ces deux étapes nous ont permis de proposer un modèle conceptuel de la qualité de service perçue du Drive et de ses effets sur les représentations mentales du consommateur (valeur globale perçue et satisfaction) ainsi que sur sa fidélité au Drive évalué.

EXPECTED RESULTS: Les résultats attendus de notre étude sont de plusieurs ordres: 1) Arriver à une meilleure compréhension de la perception des composantes de la qualité de service de drive, les représentations mentales du consommateur (valeur perçue et satisfaction) ainsi que la confiance à l'enseigne qui contribuent à la création de la fidélité du consommateur à un Drive, 2) Identifier les variables individuelles sociodémographiques qui infuencent sur le comportement modélisé du consommateur en contexte cross-canal: le Drive.

Prof Yi Liu, Prof Wenxiu Li

Ridesharing and Air Pollution: Evidence from Didichuxing

OBJECTIVES: Although highly welcomed by consumers, ridesharing as a new form of transportation is associated with various social, environmental and economic problems, and ridesharing has been extensively criticized for increasing traffic congestion and air pollution in China. The existing ridesharing literature can be grouped into two domains. First is based on the framework of computer science and dedicated to exploring mathematical models and algorithms that match large numbers of passengers and shared vehicles in real time (Nourinejad and Roorda, 2016). The studies in the second domain evaluate the social and economic effects of ridesharing, including the impact of ridesharing on self-driving behavior(Shared-Use Mobility Center, 2016), traffic congestion(Clewlow, 2017), drunk driving(Dills and Muholland, 2018), traffic accident(Barrios et al., 2018), and consumer surplus(Cohen, 2016). However, unlike other forms of transportation, there are few studies which, like ours, exploit the impacts, the crosscity variation and the welfare meanings of ridesharing. Moreover, despite the acknowledgement that ridesharing results in environment, little studies have directly estimated the environmental effects of ridesharing due to lack of data and constraint of small numbers of treated cases.

A key contribution of this paper is to quantitatively estimate the effect of ridesharing service on air pollution. We also shed light on the following importance topics. First, and interestingly, we compare responses of high and low hierarchy cities to ridesharing openings. Second, by using the city-level data on public transit ridership, we proposed a mechanism which explains the influence of ridesharing on air pollution. Third, by following the existing estimates of the health implications of particulates, we also calculate the value of averted mortality that follows from ridesharing openings.

METHODOLOGY: Taking advantage of spatial and temporal variation of the ridesharing openings across 287 Chinese prefecture-level cities, we adopt a difference-in-differences approach that compares changes in air quality index after ridesharing openings to contemporaneous changes in control cities. We use novel data at daily level from DIDICHUXING, which is the leading app-based ridesharing mobile platform in China (like Uber and Lyft in US), that generates the accurate information of ridesharing openings (defined by the first successful order), and combining with the city-level pollution data between January 2014 to December 2015. We also use the two-way fixed effects model to estimate the calendar week fixed effects, which is essential to partial out seasonality and common time trend.

EXPECTED RESULTS: We find that ridesharing significantly reduces air pollution, and the magnitude of the effect exhibits a U-shaped pattern. Evidence on air pollution is corroborated by evidence on substitution patterns between modes of transportation. Ridesharing improved the access to public transportation, and city-level data on public transit ridership show that there is a clear change in the way of passengers' traveling, from long-distance self-driving to short-distance ridesharing and public transportation.

Mrs Charlotte Feraille, Dr Claudie Meyer, Prof Christian Bourret

Innovative Services and Creation of new Ecosystems : the Case of two Tourism Platforms and their Impacts on Workforces.

Eighty percents (80%) of innovations are more social, marketing, commercial, organizational or financial, than high tech (Godet, Durance et Mousli, 2010). Authors argue that territory attractivity depend on quality of living and social relationships, and the dynamic territories are ecosystems which favorize innovations.

Ecosystems is a notion that come from ecology to combine two worlds : ecology and system (Tansley, 1935) but this concept is more ancient and studied by Forbes (1887), a zoologist. In 1953, Howard T. Odum, doctor in zoology and specialist in ecology defines ecosystems as the biggest functional unit. It includes living organisms and nonlivingorganisms (abiotic environment). They influence each other their properties, and they are both necessary to life on earth as it exists actually. The notion of ecosystem give us an inclusive framework that emphases actors, their interactions on a territory define as a space (Meyer, Sajhau, 2019). In economy, James Moore (1996) introduced a definition largely taken up about affairs ecosystem. An ecosystem is constituted by companies grouped in a chain and their stakeholders. They are in common projects of development in the time, surrounded by commitments between them. They constituted an “economic community”. In an ecosystem of enterprises, everyone contributes to value creation that profits to all. However, the notion of territorial anchorage is outweighed by actors and interactions It is the difference with a cluster which is geographically identified. Innovative ecosystems bring the labour model of workforces in question. It reinforce importance of territorial anchorage.

We propose to observe ecosystem creation, in all its dimensions - actors, interactions, territory - of two innovative platforms in the sector of tourism, thought by students of second year of MASTER Management of Innovation of Services in Technologies of Information and Communication and Management Innovation of Services in Property Assets, of Paris Est Marne La Vallée University. In collaboration with a “benevolent client”, students have to propose an innovative service mobilizing digital and property assets, to address the problematic of the “benevolent client”.

without claiming to be general, analyse of cases allows to test a reading grid of innovative ecosystem creation to subsequently to steer reflection on crucial challenges posed by services creation with a logic of anchored datas (Glaser and Strauss, 2067).

In this context, the global subject that is enforced to student is “Responsible ecosystem of Tomorrow’s City”. So projects “BEEMY” and “AUX BERGES” propose innovative services conceived as responsible. They need to take sens for creators of services, benevolent clients and stakeholders of the ecosystem of the underlying platform.

We observe the construction of ecosystem at two moment of projects. A first version is available for the framing study and a second version is produced the presentation of the Business Plan before a jury composed of professionals and academics experts. The relationships between stakeholders are qualified in the ecosystem.

In this article we propose to study ecosystem of two innovative platforms in the sector of tourism. We assume that digital innovation in tourism impact ecosystems of territorial development, defined as economic and well being of citizens growth. Technologies without platforms does not seem sufficient to enable coordination of stakeholders and construction of a service to final users (A. Attour, A. Rallet, 2014). As C. Maman, M. Abramovici, M. Jougleux and L. Bancel Charensol (2012), we think these innovative services are neither “pure” merchandising services, neither public services and ecosystems theoretical frameworks could help us to analyse interaction between private and public stakeholders to manage the stewardship of the territory concerned.

So we think that innovative and responsible ecosystems of tourism platform change employment relations and probably employment types, changing geographies of production, distribution and value chain.

Instead of traditional workforce, we are going to observe fragmented employment relationships, more distributed between stakeholders. Subordination is not as evident as in traditional model of labour. Startups that create innovative platforms of services need to rely on other stakeholders of ecosystem. They don’t are enough structured and financed to organize work as traditional models of company does.

Furthermore, we think that ecosystem as an integrated framework change evaluation because it becomes difficult to measure the impact of a the emergence of new service on employment.

Clasroom #2 Services activities and economic development

Mr José Aureliano Martin Segura & Gozal Ahmadova

Socio-Economic impact of the Granada Science Park on the local economy

"The ultimate goal of the Science Park is to promote scientific culture. And to do so while contributing to the democratization of knowledge, under the firm conviction that it is possible to bring science to all audiences, to inspire new generations and to break the erroneous division of old between scientific and humanistic culture. It aims to establish itself as a public tool at the service of education, innovation and science".

The quote above was extracted from the Science Park's annual report of 2017. However, the increasing relevance of the park as a tourist magnet and economic engine is no less important, making it a prominent economic agent and a route to creating employment. Therefore, it makes sense to evaluate social and economic effects as well as on tourism that the institution has on its immediate environment.

The last study of the socioeconomic impact of the Science Park of Granada was made in 2006. It showed it had been visited by 326,000 people, who spent 8.5 million euros generating a gross value added of 7.32 millions of euros in the country -of which 5.6 million were generated in Granada and near surroundings. In addition, 200 jobs were needed -both direct and indirect- to increase production to meet the level of demand required by tourists who visited the park.

The plan is to update this study with data from 2018.

METHODOLOGY: Already published Input Output tables have been used to calculate the socioeconomic impact, since this allows to quantify the contribution of the different branches of activity to the production and the creation of employment under a stimulus from increased demand. However, econometric models of consumption and demand will also be used to predict future evolution of trends and behaviour patterns.

Surveys on average spending from Spain's National Institute of Statistics (INE) have been taken as a starting point, differenciating national and international tourism and one day trips to estimate the total demand disaggregated by economic sectors of the visitors to the park.

EXPECTED RESULTS: The results obtained so far confirm that the activity of the Science Park has been increasing dramatically over the years. Granada's Science Park opened its doors to the public in May 1995 and that year its museum was visited by 71,000 people while 56,000 visited the planetarium. In 2018, the museum received 440,641 visits and the planetarium 119,798. The BioDomo (botanical garden and zoo) saw 198,726 people, which represents a total of entries of 750,000.

Calculating the total demand made by the different groups of visitors to the park in 2018, gives us a global figure of almost 23 million euros, which has generated 550 employments. It was then necessary that the various economic sectors produced a total of roughly over 35 million euros.

Other econometric models are currently being constructed in order to compare their estimations with those obtained through the Input Output methodology. What is expected is that the final results of both methodologies are similar.

Prof Maria Colurcio, Dr Fabiola Sfodera, Prof Isabella Mingo, Prof Alberto Mattiacci

Service Ecosystem design: the role of technology

OBJECTIVES: Technology is a recurring topic in SDL studies, especially in relation to resource integration. Early contributions on service systems (Maglio & Spohrer, 2008; Akaka & Vargo, 2012) identify the pivotal role of technology in resource integration. Furthermore some years ago Kleinaltenkamp (2012) proposed a number of research priorities including clarifying the role of technology in acting as an operant resource. The conceptualization of a service ecosystem (Vargo & Lusch, 2011) - that is a complex, relatively self-contained, self-adjusting system of resource integrating actors connected by a shared logic of institutional arrangements - is the crucial contribution for advancing the understanding about resource integration.

Our study aims to investigate how technology affects resource integration in practice and how technology leverage relationship between service provider and customer shaping new service ecosystems.

Specifically, we focus on cultural heritage ecosystem services and rehabilitation treatments services and shed light on how and when such organizations are likely to include technology in their service (with resultant improvement in participating architecture for learning and innovation) and when they are less likely to do so, which highlights a potential untapped opportunity.

METHODOLOGY: From a methodological perspective, our study benefits from a mixed-methods strategy (Creswell et al., 2003). During the data collection phase, the richness and depth of insight is associated with qualitative approach based on participation/observations and in-depth interviews with a wide range of stakeholders (customers / staff / service manager, etc.) for each service considered as an ecosystem. The qualitative approach is complemented by a quantitative one during the data-analysis phase. The collected textual data are analyzed with some appropriate software to identify, applying techniques of textual statistics (Lerbart & Salem, 1994) the main lexical-textual dimensions which take into account the diversified points of view of the various social actors.

EXPECTED RESULTS: Our study contributes to research on resource integration by providing fresh insights into the role of technology in designing and shaping the customer experience in two specific contexts: museums and rehabilitation treatments. Specifically, it shows that integrating technology into offering enhances the match between functional and experiential value (Yuan & Wu, 2008; Mathwick et al., 2001).

Technology enables resource liquefaction (Lusch & Nambisan, 2015) and individualistic experiential value as each customer may decouple, use and recombine information to get a better relationship. We argue that technology plays a pivotal role in enabling the interaction of consumers and in turn , in enabling the process of resource integration shaping new service ecosystem through the building of new relationships.

Our research provides useful suggestions to managers and operators of museum and rehabilitation centers to innovate and leverage technology to stimulate resource integration in order to improve the relationship with customers. Such type of process empowers customers and improves their participation; furthermore, it contributes in shaping new service ecosystems

Clasroom #3 New services – New jobs

Dr David Gago

Co-creating the future of work: the role of living labs as spaces of interaction

OBJECTIVES: This paper is founded on the work undertaken under H2020 project COVAL (WP5) and anchored on the increasing role of co-creation in public services to explain effective service delivery. Even though there are different ways of defining co-creation (Osborne et al, 2016) that usually overlap with other concepts such as ‘coproduction’ and ‘co-design’, this work will consider co-creation as the involvement of citizens in the initiations and/or design of public services (Voorberg et al, 2017), which basically corresponds to `co-innovation’ in Osborne et al taxonomy. For co-creation to be a major driver of public service delivery, some particular skills (especially in front-end staff, but not only) are needed, basically related to what are deemed as soft skills. These soft skills are considered to have explained a sizeable share of job growth creation in the past (Deming, 2015), and are called to reinforce their role in the future to explain work shifts (Bakhsi et al, 2017). On the other hand, living labs are currently used and conceptualised as various interactive lab-like spaces and processes of co-creation, thus integrating methods of innovation, user/stakeholder perspectives and more general values of public services. In this sense, the literature describes living labs as intermediary practices of innovation and practices of work that bring actors together around an innovation task.

Having this overall framework in mind, the main objective of this paper is to shed some light around the skills and capabilities that are determined to be more relevant in this “co-creative” relationship. Front-end staff skills will be specially analysed along with skills of the other stakeholders that directly or indirectly present in the interaction (eg. living lab managers, living lab users). Thus, the paper inquiries about to what extent the skills correspond to similar patterns despite the fact that case studies documented are somewhat different in nature.

METHODOLOGY: Article methodology is based on a case study comparison of three different living labs located in Spain: a) INTRAS-IDES, a living lab located in Castile-Leon and intended to provide opportunities to people suffering from mental illness and cognitive impairment; b) CONSORCIO FERNANDO DE LOS RIOS-GUADALINFO LIVING LAB, a network of living labs directed to enhance opportunities both to rural population and population living in disadvantaged areas in Andalusia, and c) LIBRARY LIVING LAB, an open innovation space in a public library based in Barcelona.

Different public services are represented by these three living labs, which are also diverse in the form they are organised, the way they are connected with other stakeholders, the type of users involved, the degree of formalization of living lab activity, amongst others.

Case studies have been elaborated through face to face interviews to living labs managers and/or front-end staff following WP5 COVAL guidelines, as well as ethnographic observations and other complementary desk research
EXPECTED RESULTS: Even though living lab cases are somewhat different in nature, it may be that skills needed to enhance co-production processes could be somehow convergent. As such, flexibility, modularity an empathy are skills that front-end staff should master, whereas diverse and open environments that are present in living labs as spaces of interaction may trigger cross-fertilization, help users enhance engagement and thus optimize final outcomes. Finally, it is worth emphasizing that more data is required for assessing impacts of co-creation (Torfing et al, 2016) and better and more standardized methodologies are needed to measure co-creation and to assess quantitatively the role of these skills in promoting richer co-production outcomes and impacts.

Dr Marco Tregua, Dr Cristina Caterina Amitrano, Dr Roberta Gargiulo, Prof Tiziana Russo Spena, Prof Francesco Bifulco

From the Wall to the Screen: Artworks at the Box Office

OBJECTIVES: Cultural heritage embeds a wide range of contents and embrace the interest of scholars and industries.

Technologies affect museums management in line with the key goals of cultural heritage, viz. preservation, conservation, and usage (Black, 2012; O’Flaherty, 2018). As it regards usage, new tools are offering additional ways for service provision (Bertacchini et al., 2018). Apps and augmented reality – both indoor and outdoor – are some of the instruments recently featuring museums value proposition i.e., exhibitions and heritage sites. Scholars are observing these novelties (Pieraccini et al., 2001) to identify visitors’ perception as drivers of the experience (Jung et al., 2018) and the use of new technologies and artifacts not only to augment museum experience but also to preserve heritage (Tonkin et al., 2018). With digitalisation, the “content” about offering is becoming as important as the offering itself. Content refers to photos, images, metadata, blog posts, videos, tags, audio files and online representations of companies’ resources or assets (Choi and Kim, 2017). Digital content (as blog posts and videos) are the translation of an asset into something audience can use – or work with – in the digital realm. Turning museum assets into digital content plays a key role in renewing a value proposition and its related aspects to engage customers (King et al., 2016).

Therefore, this research aims at analysing the new form of museum value propositions and the impact on visitor's experience. Specifically, the focus is on cinema documentaries on cultural sites. To the best of our knowledge, this is the first research dealing with this new form of experiencing cultural heritage, besides documentaries on heritage are not brand-new. Due to the novelty of the theme, attention will be paid to multiple issues, as the drivers of the choice to experience heritage at cinema, the interplay between this cultural product and the traditional way to experience arts, leading to the potential mutual influence in the choice of experience.

This research is framed in the ongoing studies on the heritage-centered experience and addresses recent calls for research (Thyne and Hede, 2016; Kuo et al., 2018).

METHODOLOGY: In line with the aim to analyse (a) the reasons why people choose to experience heritage through movies, (b) the potential overlapping of this experience with physical museums and heritage sites, and (c) the effects on future heritage experience, cinema audience of documentaries is the unit of analysis.

Due to variety of documentaries, this first exploratory research stage considers spontaneous online reviews. This data has already been used in research on heritage-based services (Waller and Waller, 2018), since it can provide unbiased comments on the experience.

Data collected through websites specialized on movies – commonly encouraging reviews from audience – are analysed through a content analysis to depict key issues, their interplay, and how they depict the experience at two levels, namely as a movie and as a cultural product. This technique has already proven its advantages in heritagebased services, namely the easiness in getting insights on quality (Su and Teng, 2018) and the emerging of both positive and negative reviews (Waller and Waller, 2018).

EXPECTED RESULTS: The analysis of reviews can examine people reactions in experiencing cultural heritage in a new way; then, it is interesting to discern documentaries as movies and as ways to experience cultural heritage. The insights can favour an understanding of whether these documentaries are inspired by previous experience in heritage site and vice-versa.

Results will be useful to scholars focusing on value proposition (Thyne and Hede, 2016; Kuo et al., 2018) and on technologies (Black, 2012; O'Flaherty, 2018) in cultural heritage, and to heritage sites' managers in considering documentaries as a threat to audience development or as an opportunity to further promote it.

Prof Alberto Pastore, Dr Angela Carida, Prof Maria Colurcio, Prof Bo Edvardsson, Dr Monia Melia #

Fuelling Novel And Sustainable Service Ecosystems: The Orchestrating Role of Engagement Platforms

OBJECTIVES: Within a S-D logic and a service-ecosystems view (Vargo, Lusch, 2011; Akaka, Vargo, 2014), service platforms leverage resource liquefaction and enhance resource density to enable and ensure the effectiveness of the collaborative value creation process (Lusch, Nambisan, 2015). In a platform economy context (Kenney, Zysman, 2016), service platforms (Lusch, Nambisan, 2015), such as the engagement platforms (Breidbach et al., 2017; Breidbach et al., 2014)

(e.g. Airbnb; Zervas et al., 2017), provide a structure for direct and indirect exchange and enable novel opportunities of resource integration (Caridà et al., 2018; Kunz et al., 2017) that refine existing markets and shape new service ecosystems. According to this, the paper aims to extend the understanding of how engagements platforms form new technology-enabled service ecosystems, that is, the practices and the processes that underlie resource integration and the formation of novel and sustainable service ecosystems.

METHODOLOGY: This article is conceptual in nature; it adopts a qualitative research approach and an empirical contextualization strategy (Ketokivi and Mantere, 2010). It reinterprets the Airbnb case in the light of the literature on engagement platform and service ecosystem. Specifically, the study has been focused on the "Italian Villages project 2017-2018" launched by Airbnb, the Italian Ministry of Cultural Heritage (Mibact) and the Italian National Association of Municipalities ANCI) to support the development of home-sharing practices and services in the Italian rural areas.

The narrative we build is based on both primary and secondary data. The data analysis allows us to better understand engaged actors resource integrating efforts and the process of novel service ecosystems (e.g. the Airbnb ecosystem) formation in a platform economy context.

EXPECTED RESULTS: The Airbnb network, including hosts, guests, complementary service providers, local community, local/national authorities, etc., is an emerging technology-enabled service ecosystem that opens up new modes of resource integration to prompt the individual/collective well-being and the self-sustainability of the

Italian rural territories. In such context, the Airbnb engagement platform has evolved from a multi-sided and a multi-service digital infrastructure to a service ecosystem where many actors interact, share and match resources (Caridà et al., 2018) to create and capture value.

In ICT mediated context, platforms provide not only a technological infrastructure for resource integration but also coordinate the collaboration between multiple actors and the institutionalization of new and useful economic and social practices at large. Accordingly, engagement platforms play an instrumental role in fostering both the becoming of novel resources, as properties of the service ecosystems itself (Koskela-Huotari et al., 2018), and of novel service ecosystems emerging from the combinatorial, heteropathic integration of existing resources (Peters, 2016).

The study explores and explains the orchestrating role of engagement platforms in shaping new service ecosystems. The paper provides a conceptualization of technology-enabled service ecosystems and contributes with an empirically grounded explanation of the emergence of novel and useful resource integration practices in service ecosystems. It shows how platforms orchestrate multi-actor collaboration and resource integration in practice, resulting in new and valuable service ecosystems for engaged actors process (individuals, companies, local institutions and territories at large).

Clasroom #4 Services activities and economic development

Ms Raquel Ferrero Prieto, Dr Jose Manuel de la Torre,
Dr Eulogio Cordon-Pozo, Dr María Dolores Vidal

Effect of Compensation Information on Compensation Effectiveness

OBJECTIVES: Much of the competitiveness of organizations is based on the ability to attract and retain valuable workers (Vidal-Salazar, Cordón-Pozo y de la Torre-Ruiz, 2016).

The information that is supported by the organization can have certain positive effects on the attitudes and behavior of workers, by increasing the trust of workers in the organization (Colella et al., 2007) and by influencing their perception of the three forms of organizational justice: distributive, procedural and informative justice (Marasi y Bennet, 2016).

However, on the other hand, some research has revealed some of the disadvantages of supplying information about the compensation. In this sense, Colella et al., (2007) proposes three main benefits offered by a policy based on pay secrecy: organizational control, protection of privacy and reduction of labor mobility.

The purpose of this project is to analyze the degree to which the effectiveness of the compensation system (monetary component and benefits) is conditioned by the information which is provided by the companies related with such compensation system.

METHODOLOGY: Data were collected through a structured questionnaire that was allocated in a website by the company Edenred. Our final sample was composed by 808 employees from different Spanish firms. We limited our research to Spanish firms to remove any possible distortion arising from the biases that various labor regulations might introduce.

Proposed hypotheses have been tested using the SPSS statistical package and the PROCESS macro to estimate models with moderator variable.

EXPECTED RESULTS: The main results expected from this research are materialized with the following hypotheses:

- HYPOTHESIS 1: The information about monetary salary level moderates the relationship between satisfaction with the level of monetary salary received and employees' perceived organizational support.
- HYPOTHESIS 2: The information about how is determined the monetary salary moderates the relationship between satisfaction with the determination of the monetary component and employees' perceived organizational support.
- HYPOTHESIS 3: The information about the level of benefits moderates the relationship between satisfaction with the amount of social benefits received and employees' perceived organizational support.
- HYPOTHESIS 4: The information about the form to determine social benefits moderates the relationship between satisfaction with the determination with social benefits and employees' perceived organizational support.

- HYPOTHESIS 5: The salary information about the form in which benefits are administered moderates the relationship between satisfaction with the form social benefits are administered and employees' perceived organizational support.

Dr Mervi Rajahonka, Mrs Kaija Villman

From lifelong earning to lifelong meaning - Perspectives to lifelong learning and sustainable careers of women in service businesses

OBJECTIVES: Nowadays, people are searching for meaning and consistency in their lives. Work and employment are not seen merely as a means to earn money, but people want their work to be interesting and meaningful, full of opportunities to learn new things and grow, and in line with their values. This applies especially persons of the younger generation, but this phenomenon can be seen in every age group today.

This paper discusses female managers and entrepreneurs working in service businesses and their views towards lifelong learning. Especially we focus on how lifelong learning relates to their careers, wellbeing at work and search for meaningful lives. Our research questions are: 1) How do female managers and entrepreneurs use lifelong learning in advancing their careers?; 2) What role lifelong learning has in ensuring their wellbeing and meaningful lives?; and 3) How can lifelong learning advance sustainable careers of women?

METHODOLOGY: In the paper, we discuss theories, concepts and models of lifelong learning and human resources based on the extant literature. For the background, we present a literature review of the theories of lifelong learning and human capital (HC), as well as the resource- and knowledge-based views, and the dynamic capabilities theory.

There are diverse definitions of the HC concept built around characteristics of people employed in organizations, and some of them take into account, besides intelligence, ideas, skills, creativity, innovation etc. of people, but also their wellbeing and learning potential. Among researchers, there is a rather common opinion that training and education investments improve productivity and growth. However, some researchers emphasize the role of formal education in communicating about the employees’ skills to employers.

Our point of view is that of an individual, especially a female manager or entrepreneur. Our empirical data is drawn from interviews with over 40 women participating in training and coaching programmes in the South Savo region, Finland. EXPECTED RESULTS: We present a new model integrating earning, learning and meaning aspects of work and entrepreneurship. We illustrate the model with empirical material gathered in interviews of over 40 women participating in training and coaching programmes.

One of our interviewees pointed out that after she had understood that she only had one life and after she had stopped trying to separate work and the rest of the life, things got easier. Another stated that the most important thing for her is that the work is meaningful, and this has occasionally led to bad career choices, because she has changed jobs whenever she had the feeling that she does not have control over her work. Many women emphasized that digitalization has been a big change, but together with the help of lifelong learning, it has also offered them opportunities to advance in their careers to more important job positions.

The paper contributes to the discussion on lifelong learning and the mechanisms how it can help advancing meaningful and sustainable careers of women in service businesses. The importance of services is growing, and ever more people work in service businesses. Offering meaningful work opportunities for their employees has become a competitive advantage for service companies. For an individual worker, meaningful work and lifelong learning opportunities assure personal development, social inclusiveness, job satisfaction, productivity, wellbeing at work and a sustainable career. Achieving opportunities for lifelong learning is especially important for women, whose careers are often fragmented.

Dr Mervi Rajahonka, Mrs Kaija Villman

A Maturity Model for Service Development for SMEs

OBJECTIVES: The growing importance of services and service development for the success of companies has become undeniable. For many small and medium-sized enterprises (SMEs), turning their organization-centric thinking to customer-centric is a difficult journey. In this paper, we present and discuss maturity models found in the literature useful for evaluating and supporting the development of service businesses in SMEs towards customer-centricity.

Earlier, maturity models have been used in several management fields. They can be seen as stepwise roadmaps for capability assessment, useful for defining firms’ improvement targets and steps. We rely on the perspective of service business development, and we are especially interested in how SMEs can learn to evaluate and upsurge their customer value to offer better services and customer experiences.

After going through maturity models presented in the extant literature, we present our own model, based on service business development, service design and design thinking views, for evaluating service business maturity and development. We describe the first impressions of the applicability of the model in SMEs in Finland. We also analyze the potential challenges of SMEs when they start using design thinking and service design methods in their own contexts.

Our research questions are: 1) What kind of maturity models are there useful for evaluating and supporting the development of service businesses of SMEs towards customer-centricity?; 2) How can SMEs evaluate and develop their customer orientation and their development stage in service business development?; and 3) What kind of challenges SMEs may have when they start using design thinking and service design methods in their own contexts?

METHODOLOGY: First, we present a literature review of maturity models, which can be used for evaluating the development stage of service businesses. Our empirical data is gathered from SMEs participating in service design training and coaching programmes in Finland. After presenting and analyzing previous maturity models for service development, we present our own model and analyze the first impressions of applicability of it in SMEs. The model is based on the views of service business development, service design and design thinking, and it is co-created with SMEs.

EXPECTED RESULTS: We discuss maturity models useful for evaluating and supporting the development of service businesses of SMEs. Our own model is based on service business development perspective, service design and design thinking. We co-create it gradually with SMEs participating in service design training and coaching programmes. We present a preliminary analysis on the usefulness of the model for SMEs.

The paper contributes to the theories and practice of service business development, especially design thinking and service design methods and their applicability in SMEs. To the best of our knowledge there are no models combining service design and maturity approaches in the literature. This paper aims to fill this gap.

By presenting a stage model for service development, we aim to help SMEs to understand their current positions, and the steps that will be required to progress forward to the next level in service development and beyond. The paper also sheds light on the possible challenges SMEs may experience as they begin to adapt design thinking and service design methods to their own contexts.

VIERNES, 13 DE SEPTIEMBRE

08:30-10:00 h. Parallel Sessions V

Clasroom #1

New services – New jobs

Dr Eduardo Castellano, Dr Urko Lopez

Design process of a servitization Roadmap for Basque manufacturing cooperatives

OBJECTIVES: This paper's main aim is to design a servitization roadmap taking into account the heterogeneous activities that the cooperative firms (especially within Mondragon Group) have.

Expand the offer of manufacturers through industrial services (with higher margins, which generate recurring income throughout the life cycle of the product, and help to retain customers) has become a real challenge for manufacturing firms.

Thus, it is necessary to generate a structure of the sequence of activities to be put in place to design and execute a strategy, a business model, as well as the operational processes necessary to serve the supply of industrial manufacturers.

The objective of generating this sequence of activities is to help industrial manufacturers define an action plan to establish a business strategy, as well as the processes necessary to promote the development of industrial services. This could be applied especially, although not only, in processes and activities related to development, culture of innovation and entrepreneurship and in processes of marketing and valuing the offer.

METHODOLOGY: The methodology consists on the following steps:

1. Compilation of the existing methodologies regarding to servitization design processes

2. Workshops, expert courses and Communities of Practice with manufacturing firms, in order to listen their main challenges, obstacles in order to design new services and develop business units linked to the services
3. Design of a servitization roadmap in order to help firms to design and develop new business strategies to promote the development of industrial services.

EXPECTED RESULTS: The expected result is a Roadmap model to help firms to take steps forward from manufacturing and selling Products, to have revenue streams for Solving problems through different product-service combinations and forms of Monetization

Mr Morten Hansen, Mr Niels Christoffersen, Mr Per Laugesen

Developing E-government solutions in Denmark – balancing public/private and civic/customer perspectives

OBJECTIVES: In our paper, we set out to investigate the potential tension in applying service and business models developed for use in the private sector when developing and delivering E-government solutions in Denmark, as well as the potential complications that public sector requirements may pose to project management, cooperation and the concept(s) of value during the development and implementation phases.

We seek to draw attention to the different interpretation needed in approaching digital solutions for the public sector with its added emphasis on the “citizen as user” in terms of rights (Angelopoulos et al., 2017), participation (Lee-Geiller; Lee, 2019) accountability (Janssen; van der Voort, 2016), as well as not only compliance but also compatibility with bureaucratic (Cordella; Tempini, 2015) (Nograšek; Vintar, 2014) and political (Tassabehji; Hackney; Popovič, 2016) processes in a democratic, developed state.

Such ICT acquisitions also involve the public sector itself weighing various value positions, such as professionalism, service, efficiency and engagement, against each other (cf. Persson et al., 2017), which may also impact choices of both the scope of the chosen ICT solution and the collaborative process vis-à-vis the private developer(s). Such complex processes may lead to an equally complex series of challenges (cf. Mäki-Lohiluoma et al., 2016) that may even result in failure of the entire project (cf. Anthopoulos et al., 2016).

Our core research question is thus how or whether, during the development phase, public and private actors are able to reconcile the dual perspectives of their end users as citizens and customers and the actors’ roles as public servants and private entrepreneurs, or whether either of these two sets of perspectives “leak” into the other during the process.

METHODOLOGY: We draw our inspiration from a combination of the e-government, service design and project management literatures and seek to combine these into a more coherent framework to outline the particular intricacies of public/private sector collaboration in creating the digital solutions that underpin e-government.

This will be supplemented by data collected in a series of qualitative interviews made with private sector actors and their public sector counterparts who have been involved with the development of such e-government solutions at either the municipal or state level. The interviews focus particularly on conflicts, misunderstandings or similar types of friction between the public and private stakeholders during the development and implementation phases.

EXPECTED RESULTS: Our main focus is on whether and how it may be necessary to adjust the standard models within service design, project management and budgeting to provide a more useful tool when developing digital solutions for the public sector. This also involves the question of how to implement political decisions through a public/private sector collaboration and the potential tensions concerning budgetary aspects, such as financing and how any expected efficiency gains are treated in the budget.

E-government solutions thus require private developers to focus on aspects particular to the public sector. These include limited possibilities for “citizen users” to opt out; a high emphasis on civil rights and duties, differing from the transactional relationship between private customers and providers; as well as the need to adapt to the specific, legal and accountability requirements of the political and bureaucratic processes in a democratic, advanced economic country with a strong commitment to e-government.

We thus expect to both identify particular issues pertaining to designing E-government solutions in terms of the “citizen as user and/or customer” dilemmas.

Mr Fabio Iannone, Dr Vera Ferrón Vilchez

The importance of environmental training on green public procurement

OBJECTIVES: Green public procurement (GPP) is defined as “a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life-cycle when compared to goods, services and works with the same primary function that would otherwise be procured.” (European Commission, 2016). GPP is a voluntary instrument that can help in stimulating the demand for more sustainable goods and services which otherwise would be difficult to get into the market. Nowadays governments of Italy and Spain moved into this field, although with different effectiveness of policies and different speed and incisiveness and, mostly, with different level of mandatory.

People in charge of the decision-making of GPP need to be well-trained in environmental issues. Environmental training is the process to provide employees with environmental knowledge, skills and behaviors that allow them to meet the organization’s environmental goals (e.g., Jabbour, 2013). Analyzing the relationship between GPP and environmental training is essential for, at least, two main motives. On the one hand, governmental agencies are a key agent in the dissemination of responsible environmental behaviors. Public entities are able to influence thousands of citizens to create sustainable culture and, on the demand side, to stimulate the market and, on the supply side, to be a catalyzer of environmental policies (Aragão and Jabbour, 2017). As a consequence, it is necessary that the public decision-makers will be well-trained employees on environmental issues. On the other hand, managers in charge of procurement on public sector organizations are responsible for the use of “taxpayers’ money” (Aragão and Jabbour, 2017: 50). This position implies the responsibility of making the best use of these economic resources and, consequently, the investment of this money has to comply with social and environmental requirements. People in charge of this decision must well-know what these environmental requirements and objectives are, and environmental training is the accurate tool for acquiring this knowledge.

As a consequence, the objective of this research is to explore whether environmental training could be linked with an effective GPP decision making. This research sheds light on how environmental training could be used in stateowned organizations from literature review and field data from 15 public-sector entities located in Italy and Spain (Andalucía and Cataluña).

METHODOLOGY: To analyze this relationship, we rely on a qualitative approach with in-depth interviews. The purpose is to provide details on how public officers address sustainability through public tenders.

1. The first phase is conducted as a desk research. The aim is to collect documents related to GPP policies. In this phase, the researchers confront themselves to find the best solution to investigate the relation between environmental training and GPP. Then, a draft of the first evidences is made, to proceed with a solid base to the development of an interview protocol (in Italian, Spanish and English).
2. The second phase is the phase of the interviews with public officers, dealing with public tenders, in their daily working activities. Every interview takes at least 60 minutes. Finally, every interview is recorded and transcribed, for a total of time (to date) of more than 10 hours and more than 18.000 words.
3. The third phase consists of the empirical treatment of information by using a content analysis software (prefereably NVIVO).

At this moment (May 2019), this research is in the second phase (i.e., collecting field data).

EXPECTED RESULTS: We expect to empirically support our research hypothesis that states “environmental training is positive related to the adoption of an effective GPP”. This result would be in line with prior literature that argued employees are the “ultimate actors” in any environmental initiative (Perron et al., 2006) because the success in the implementation process is in charge of them.

Clasroom #2 Services activities and economic development

Mr Pablo Ortega Carrasco, Dr Vera Ferrón Vilchez

The suitable organizational characteristics for signalling Corporate Social Responsibility practices in industrial and services companies

OBJECTIVES: Companies are increasingly aware of the impact of their activities on society (Hahn & Lülfs, 2014) as a large amount of information is generated about what they do and most of this information is open to the public, it is free and it is available online. However, there is another type of private information that generates certain asymmetry between those who possess it and those who could make more rational decisions if they had it (Stiglitz, 2002). Thus, a significant percentage of companies that implement corporate social responsibility (hereinafter CSR) initiatives decide to publish their sustainability reports as a means to publicize these CSR practices to the general public and thereby legitimize their actions in response to the social norms and stakeholders’ expectations (Guthrie & Parker, 1989, Deegan & Gordon, 1996; Woerkom & Zeijl-Rozema, 2017). In this regard several questions arise among which is the following: What characteristics must comply those firms that decide to communicate to society its social and environmental commitment through certain signs? This paper deals with the sending of CSR signals, understood as a specific kind of environmental communication practices (González Benito & González Benito, 2006) consisting of transmitting information regarding the social and environmental behavior and/or performance of the company that is decided to be disclosed voluntarily and intentionally. Drawing upon Signaling Theory (1973), the main objective of this work is to examine whether the sending of CSR signals by firms to society through the publication of CSR reports under the GRI standard is related to certain organizational variables such as firm size, profitability, corporate reputation, ownership structure (the degree of concentration) and type of sector in which the firm operates.

METHODOLOGY: To analyze these relationships we proposed 5 research hypotheses:

- H1: Sending CSR signals is positively related to operating in a highly polluting sector.
- H2: Sending CSR signals is positively related to non-concentrated ownership structure.
- H3: Sending CSR signals is positively related to high profitability.
- H4: Sending CSR signals is positively related to the size of the company.
- H5: Sending CSR signals is positively related to a positive corporate social reputation.

To empirically test these hypotheses, we relied on a sample of 95 Spanish companies indexed in the MERCO ranking. We run a binary logistic regression model.

EXPECTED RESULTS: Our results have shown that companies that operate in highly polluting sectors, larger and with higher profitability tend to be more inclined to send CSR signals. However, findings have not shown the existence of statistically significant associations between the sending of CSR signals and neither the degree of concentration of the ownership structure, nor with the corporate reputation.

Dr Benoît Desmarchelier, Prof Faridah Djellal, Prof Faïz Gallouj

Mapping Social Innovation Networks

OBJECTIVES: Social innovations entertain an ambiguous relationship with networks: on one hand, one of their main outcomes is to generate (not for profit) relationship between agents (providers and users), but on the other hand they are easily attributed to single innovators, like Muhammad Yunnus in the case of the micro-credit (Mulgan, 2006; 2007). We argue that this ambiguity reflects insufficient investigation of the process of social innovation, both at the empirical and theoretical levels (Cajaiba-Santana, 2014). In this context, our objective in this paper is to fill-in this gap by exploring the structure of existing networks aiming at producing social innovations.

METHODOLOGY: We construct temporal networks of social innovation based on publicly available information. Networks are distinguished based on a classification of their main actors, whether they are manufacturing organizations, public or market services, or emanations of the third sector (Desmarchelier, Djellal, Gallouj, 2018). In each case, we aim at assessing the degree of proximity of social innovation networks' structures with those of (standard) innovations. Successful innovation networks are indeed displaying small-world properties and they are robust to the random removals of agents (Newman, 2001; Albert et al., 2000), which generates spillover effects among agents as well as a significant lifespan of these networks (Desmarchelier and Zhang, 2018).

EXPECTED RESULTS: A better understanding of the properties of networks aiming at social innovations can be important for explaining the production process of these innovations, as well as their success or failures in the diffusion phase.

Dr Eulogio Cordon-Pozo, Dr Jose Manuel de la Torre, Dr María Dolores Vidal, Ms Raquel Ferrero Prieto, Prof José Aureliano Martin

More is not always better! Innovation Training and the performance of innovation in the financial sector

OBJECTIVES: It is generally accepted that services are an important part of the economy of any developed country. On the other hand, within the services sector, the development of financial services - including banking and insurance - are a fundamental pillar of the competitiveness of the countries.

The banking industry is undergoing a profound transformation due, among other factors, to changes in the needs of consumers. Thus, innovation can be a determining factor for the success and survival of companies in the sector.

In this research we analyze if the expenses that the banking and insurance companies make in training their staff to facilitate innovation influence their innovative performance.

METHODOLOGY: The database used in our study is the Technology Innovation Panel (PITEC). This database is based upon the Spanish Innovation Survey carried out by the National Institute of Statistics (INE), based on the Community Innovation Survey (CIS), which follows guidelines laid down by OECD's Oslo Manual to enable comparison between countries. PITEC is designed as a panel survey. This allows for both estimating the changes over time and taking the heterogeneity of a firm's decisions into account.

Although the time period covered by the panel was from 2003 to 2016, there were changes in the questionnaires (e.g., some content questions or some wording of questions) that prevented the use of full panel data in our study. This implies that the results of this study are based on panel data from 2007 to 2016, a period during which all the variables considered in our model were comparable.

To measure service innovation performance we built an indicator as the sum of two values: a) percentage of sales due to innovations in services that where new for the company and were introduced in the previous two years, and b) percentage of sales originated by innovations in services introduced over a period of two years and representing a novelty for the market in which the company operates.

We propose a model with panel data in which the performance of innovation in services depends on the investment made by companies in specific training to encourage innovation (innovation training).

We also consider several control variables including, among others, the size of the company or whether or if the company is integrated or not into a business group

EXPECTED RESULTS: Our starting hypothesis is that a greater investment in training for innovation will imply an improvement in the performance of service innovation. However, we hope that this relationship is not linear, postulating that its form will be an inverted U.

14:30-16:00 h. Parallel Sessions VI

Clasroom #1 New services – New jobs

Ms Milena-Jael Silva-Morales, Ms Silvia Gliem, Ms Magdalena Stuebner, Prof Camal Gallouj

Multi-service urban digital platforms as a system of systems to support the advent of smart service systems for smart cities: What challenges on new ways of working?

OBJECTIVES: Nowadays, the implementation of the concept of the smart city seems still flue, complex and difficult to implement. In order to fill this gap from a practical and academic point of view, this article proposes an approach to implement smart city initiatives seeking to manage all digital urban services co-creation of multi-service platforms as a system of systems containing smart services systems. This research aims to provide insights into the actual deployment of smart cities initiatives, specifically, multiservice urban platforms in a European context. Also, this research aims to contribute to the understanding of the new modes of organization necessary for the management of urban services of the smart city.

METHODOLOGY: This research is based in experimentations and semi-directive interviews. Also, this research utilize web scraping in order to mapping news ways of working in the context of complex service-ecosystems and multi-services platforms for provide urban smart service system.

EXPECTED RESULTS: This research provide a theoretical framework identifying drivers, barriers and enablers regarding news ways of working in the context of smart service provide. Also, propose several sensemaking / sensegiving mechanisms (Gioia & Chittipeddi 1991; Weick 1995), in order to overcome the barriers and legitimizing the transformation towards multi-service urban digital platforms as a system of systems to support the advent of smart service systems for smart cities.

Ms Mª Trinidad Montes, Mr Gabriel Garcia-Parada

Entrepreneuriat senior, option ou obligation?

OBJECTIVES: La réduction du taux de natalité, et l'augmentation de l'espérance de vie génèrent une population vieillissante dans la plupart des pays industrialisés. Face à cette situation, tant les Etats et les spécialistes des sciences sociales étudient la possibilité d'étendre la vie professionnelle à l'âge mûr, ainsi qu'une révision du concept traditionnel de la retraite. Les alternatives qui se posent pour cette extension, sont liées d'une part à la conception de nouvelles conditions de travail, incorporant des modèles de travail flexibles ou partiels, tels que l’emploi-pont, qui a non seulement des avantages au niveau économique en termes de la viabilité des pensions, mais a aussi des avantages importants pour les entreprises, car elles ne se débarrassent pas de ce capital humain, qui ont beaucoup de talent et d'expérience, et qui disparaît soudainement quand ils prennent leur retraite, quand ils peuvent, entre autres, aider les nouveaux membres qui sont incorporées. D’autre part, nous trouvons l’alternative à faciliter l’entrepreneuriat senior (entrepreneurs avec un âge supérieur à 50-55 ans), qui, selon les études réalisées, non seulement contribuent à l’économie avec leur travail, mais génèrent la possibilité du travail pour les autres. Par exemple, leurs entreprises génèrent plus d’emplois que ceux créés par les jeunes, c’est-à-dire que ces entrepreneurs créent généralement des entreprises de 5 employés minimum. Enfin, le maintien de l’activité professionnelle, a également de multiples effets bénéfiques au niveau psychologique, parce qu’il contribue à maintenir l’identité professionnelle qui a été générée tout au long de la trajectoire professionnelle, et maintient le sujet actif plus longtemps, accroît là le bien-être, améliore la santé mentale, renforce l’autonomie personnelle et économique, et facilite la transition vers la phase de retraite définitive, réduisant les effets négatifs causés par les changements soudains.

METHODOLOGY: Cette étude vise à évaluer les facteurs psychosociaux associés à la personne entreprenante en fonction de l’âge des sujets, en essayant de radiographie le profil de l’entrepreneur national. Notre analyse a utilisé l’échantillon croisé national de 450 000 personnes de l’enquête sur la population adulte (APS), qui est recueillie par le consortium Global Entrepreneurship Monitor (GEM) et couvre la période allant de 2009 à 2016. Parmi les quatre catégories d'âge utilisé dans ce format: jeunes adultes (18-29 ans), adultes (30-49 ans), adultes d'âge moyen (50-64 ans) et personnes âgées (65-80 ans), sera appliquées des statistiques descriptives et relationnelles, dont nous pouvons extraire des réflexions et des conclusions.

EXPECTED RESULTS:Sur la base des résultats obtenus, sur le profil de l’entrepreneur national, nous avons l’intention de faire une série de propositions qui favorisent ce segment des entrepreneurs, qui offre de si bons résultats à tous les citoyens. Étudier comment, à partir des institutions sociales et éducatives, nous pouvons contribuer à cet objectif, ainsi que diagnostiquer le cas échéant, les éléments et les circonstances qui entravent cette réalisation, ainsi que de détecter les structures de le pensée formel qui ne permettent pas un développement réussi de cette nouvelle réalité, l’entrepreneuriat des personnes d’un certain âge.

Le conditionnement des environnements de travail pour ce groupe est déjà une nécessité, tant sur le plan économique que social et psychologique, car beaucoup de gens seront forcés d’allonger leur vie professionnelle, par les nouveaux scénarios de contribution à l’ensemble de Société et nouvelles éventualités sociales. Tout cela nous amène à planifier un nouvel environnement de travail, sans oublier un engagement social nécessaire qui doit agir comme un catalyseur dans l’inclusion de toutes les personnes, et en particulier celles du segment auquel nous nous référons dans ce travail.

Clasroom #2 Services activities and economic development

Ms Estibaliz Hernandez Eleno, Ms Iñaki Fernandez

A multidimensional model to assess knowledge intensive business services (KIBS) firms’ competitiveness

OBJECTIVES: Myriad authors clearly indicate the importance of knowledge intensive business services (KIBS) for the competitiveness of global economies and they proclaim they have different and complementary roles:

- Facilitators of innovation by supporting their client firms in their innovation processes.
- Innovation carriers through their role in the transfer of existing innovations to their clients.
- Source of innovation: in this case, KIBS firms play an important role at the beginning and development of innovations in their client firms.

In this paper we propose an integral model to assess the competitiveness degree of KIBS companies. The model is composed by six factors: innovation, talent, relational capital, internationalization, value proposition and financing; and each of the factors consists of four subfactors, so, it is composed by a total of twenty subfactors that will determine the level of competitiveness and the key features of KIBS firms.

METHODOLOGY: First of all, we will use mathematical data analysis, such as supervised learning models and predictive modelling techniques to develop a tool to assess the level of competitiveness of knowledge intensive business firms. This analysis will be carried out based on financial and economic ratios of a sample of more than 4000 KIBS firms.

Then, a deeper qualitative analysis (by means of surveys and semi-structured interviews) will be done in order to validate a multidimensional model to assess the level of competitiveness of KIBS and determine the most significant factors for positive performance.

EXPECTED RESULTS: In this research we expect to build a validated model to assess KIBS competitiveness from a multi-dimensional perspective, and identify the most relevant variables to of competitive advanced services.

Dr Martin Falk

Hotels benefit from stricter Airbnb regulations

OBJECTIVES: Airbnb and other online renting service providers appearing under the flag of the so-called sharing economy, have restructured the accommodation market and shown enormous growth in recent years. Consequently, traditional establishments such as hotels feel threatened and their associations have lobbied for the implementation of laws that restrict this type of activities. In European cities (e.g. Amsterdam, Barcelona, Berlin, London and Paris), different kinds of regulation have been introduced on these short-term rentals from 2015 onwards (Nieuwland and van Melik, 2018). These regulations often consist of a maximum day limit on short-term rentals. The basic idea of the local authorities is to reduce the supply of short-term rentals, particularly those that are offered on the platforms on a permanent basis. The occasional rental of a property is not considered a major problem. Berlin and Barcelona introduced the strictest regulations, the first prohibiting the Airbnb rental of entire properties and the second suspending the granting of new licenses.These arrangements may have led to a slowdown in Airbnb's growth rates, increase in Airbnb's accommodation prices and ultimately to an increase in hotel nights. Recent empirical evidence shows that in the low-price segment, Airbnb accommodations are a competitor to traditional hotels (Zervas, Proserpio and Byers, 2017).

The aim of this study is to investigate empirically if the stricter Airbnb regulations impact on foreign overnight stays in accommodation establishments. A panel difference-in-differences model is used to estimate the treatment effect of stricter Airbnb regulations.

Little is known about the presumed impact of tightened rules on short-term rentals on the performance of Airbnb accommodations. An exception is Yang and Mao (2018) who find that regulations matter for Airbnb supply in US cities. Hsi (2017) documents that regulations have a negative impact on Airbnb supply. Zervas, Proserpio and Byers (2017) show that Airbnb accommodations and hotels are competitors particularly in the low-price segment (see also Farronato and Fradkin, 2018). Fang, Ye and Law (2006) find that the entry of the Sharing Economy has a positive but non-linear effect on the entire tourism industry.

METHODOLOGY: A partial adjustment model is used and estimated using the Fixed-effects Quasi maximum likelihood estimator with robust standard errors (Hsiao et al., 2002). The method is particularly suitable for short dynamic panels with highly persistent variables as is the case for foreign overnight stays. Data is based on foreign overnight stays for the 50 largest tourism cities in Europe for the period 2004-2017. The control group consists of cities where there are no regulations on Airbnb rentals. The specification includes accommodation prices of the destination city, change in the VAT for accommodations, terror attacks, real income of the destination country and time dummy variables.

EXPECTED RESULTS: Evidence based on the dynamic panel model shows that stricter Airbnb regulations in the five cities lead to an increase in foreign overnight stays of about 8 per cent in 2016 and 7 per cent in 2017. This indicates that Airbnb accommodations and traditional accommodations are substitutes. The control variables show the expected sign. Foreign tourism demand exhibits a high degree of persistence as shown by the coefficient of the lagged dependent variable of close to one. Terror attacks leads to a decline in foreign overnight stays of 13 per cent in the current year and 7 per cent in the following year. VAT decreases lead to an increase in foreign overnight stays of about 7 per cent in the current year. Hotel prices and real GDP of the destination country are not significantly related to foreign overnight stays. Static Fixed effects models leads to similar effects of the stricter Airbnb regulations. In addition, the treatment effect is also not sensitive to the choice of the control group.

Dr Francisco Rejón-Guardia, Prof Guillermo Maraver-Tarifa

Measurement model proposal for the evaluation of teaching performance by the students according to the conceptual framework of the dominant service logic theory.

OBJECTIVES: The evaluation of teaching performance by students today is of relevant importance in a context of improving the quality of education. However, the construction of an adequate tool to measure the performance of teachers has been controversial due to the lack of consensus on the educational dimensions that should be evaluated. Therefore, this paper proposes a measurement instrument based on educational theory, the results of other studies and in-depth meetings with lecturers. With the empirical design and the implementation of a questionnaire, it is intended to propose a model that reflects the effectiveness of education and its influence on the level of student satisfaction. The data is analyzed and interpreted within the conceptual framework of the dominant service logic theory.

A differential aspect of this research is the consideration of the virtual learning environment as a new model of relationship between teacher and student. Nowadays it is evident how the use of Internet and new technologies in higher education, as well as the formation of virtual learning communities, increase in many universities. Therefore, it is important that teachers find ways to strengthen virtual relationships with and among their students. However, there is little knowledge on how to plan, implement and evaluate the use of new technologies in classroom teaching.

A first objective is to expand the applicability of the teacher evaluation instrument by incorporating a series of dimensions that better reflect the current reality. With this work we want to draw attention to the importance of defining an adequate instrument to evaluate the teaching activity and suggest an additional approach to evaluate the implementation of ICT in classroom teaching. In this sense, this work raises two key questions. First, if the proper use of ICT in face-to-face education improves the quality of learning programs. Second, how the use of ICT affects the student's learning experience.

METHODOLOGY: An exploratory factor analysis of a representative sample of students from two universities will allow us to analyze the reliability and validity of the proposed measurement instrument and the discriminant validity between the factors identified. With this, the results confirm the validity and usefulness of the proposed measurement instrument as an adequate indicator of performance of the quality of university education by its teachers. The methodology applied for the analysis is the factor analysis and then it is proposed an SEM model with PLS to see the relationship between the variables. In this sense we have included in the questionnaire two final dependents variables, which measure general satisfaction with the teacher and with the subject.

EXPECTED RESULTS: Among the conclusions we hope to achieve, we emphasize that the ICT improves efficiency and flexibility in the student's learning process, while contributing to the acquisition of specific competences and collaborative work among equals.

The evaluation of the satisfaction of university students is crucial to understand how the service offered by the university is perceived. In an international and competitive context between universities it is necessary to reduce the deviations between what is offered and what is actually perceived by the student. In this sense, it is observed that there are new tasks and aspects based on communication and information technologies that affect student satisfaction on the part of university professors.

Clasroom #3 New services – New jobs

Mr Christophe Said, Prof Giuseppe Strina, Dr Feriha Özdemir

Developing digital service systems innovations in SME especially crafts

OBJECTIVES: New digital start-ups are threatening business models of traditional service providers. Creating new service systems innovations in a digital world has reached a new dimension. Examples like Uber and Zipcar in transportation, Airbnb in hotels and hospitality or AngelList in venture capital reflect the digital disruptions that began two decades ago.

Especially SME businesses in the field of crafting are facing new challenges in developing innovative service systems.

The purpose of this study is to examine, exemplary in selected companies, to what extent accompanying concepts / coaching concepts for SME can be developed specifically to help crafts, to identify digitization and digitalization potentials for the company and to realize new innovative services. The focus is clearly on the transferability of these concepts to other craft SMEs to help them developing digital smart services.

METHODOLOGY: We work with the systemic-approach to develop service innovation. This approach is based on the process design of the “Solution Cycle” according to Bergmann that consists of three main steps: diagnosis step, realization (therapy) and reflection (Bergmann and Daub, 2008).

Based on this systemic-relational approach, solutions for complex problems within a social constructed reality become more possible. This will be achieved by an iterative communicative interaction process. Following this approach, the project can be divided into three main project stages. The first stage of the networked innovation process is designed perceptually (diagnosis) which is characterized by the partial step one (recognizing) and partial step two (clarifying) as the foundation of the four innovation developments. Throughout the entire project, the diagnosis step is most relevant and decisive for the further development of the project.

EXPECTED RESULTS: On the basis of our research, our results casts a new light on the potentials of digitization for SMEs, in particular for crafts.

We formulate a first approach of a concept, which supports the evolution of new smart digital service innovations for SMEs, in particular crafts. The ideas from the ongoing accompaniment are synthesized and special features in the (digital) transformation process are shown. Furthermore, first case study results of the proposed method will be presented and we will compare our results with those of the traditional methods.

Mr Pedro Costa, Ms Elisabete Tomaz, Ms Maria Assunçao Gato, Ms Margarida Perestrelo, Ms Ana Rita Cruz

Assessing creative tourism initiatives in small cities and rural areas of Portugal: an integrative model for local impacts

OBJECTIVES: Over the last decades, tourism has experienced an exponential growth, expansion and diversification, being considered one of the most important socioeconomic sectors in the world, an essential source of income, employment and resilience for communities in many cities and regions (e.g. Bellini et al., 2017; Romão and Nijkamp, 2017; Weidenfeld, 2018). In this sense, it is increasingly necessary to carry out impact assessment studies given the significance of these activities, but also the concerns they raise, particularly regarding the effects on local resources and host communities.

If research on tourism impacts focused initially on the economic dimension, since the 1980s, there has been a growing awareness of the need to develop new assessment methods to more accurately determine the multiple linkages and direct/indirect effects of such activities on economy, society, culture and the environment, as part of broader strategies for sustainable development.

In response to the negative effects of cultural tourism and changes in consumption patterns, culture-based creativity is seen as a path to improve more sustainable tourism practices, creating competitive advantages and inducing the economic growth of territories.

Thus, many governments have sought to reinvent the image of their territories and differentiate them as creative tourist destinations, encouraging synergies between tourism and the cultural and creative sectors to foster the development of new products, experiences and markets.

Despite the popularity and diversity of resources and events that are available in large capitals and metropolises, small towns and rural areas also seek to benefit from the growth of the tourism industry by identifying their unique characteristics and values, proposing a range of experiences oriented to niche markets. In addition, they want to affirm themselves as a sustainable alternative to the problems of congestion and tourism massification suffered by large metropolises. In this sense, tourism activities are proposed to offer unique, authentic and personalized experiences and promote interactive learning through the integration of cultural practices that seek to be rewarding for visitors and locals.

There are few studies that attempt to measure the impacts of creative tourism activities, and even less those that seek to go beyond economic impact, in accordance with the principles of sustainability (Buaban, 2016; Korez-Vide, 2013; OECD, 2014; Qiu et al., 2018; Richards and Wilson, 2007; Solène, 2011). They present some conceptual and operational questions due to the nature of these activities, the disparate effects at different levels and territorial sectors and their specific characteristics.

Therefore, the goal of this paper is to discuss the theoretical and methodological framework used on the impacts assessment in the field of sustainable creative tourism, aiming to propose a more integrative model that comprehends the different dimensions of sustainability in creative tourism-related initiatives.

METHODOLOGY: That model will be based on a case study analysis informed by data collected within the scope of the project CREATOUR - Creative Tourism Destination Development in Small Cities and Rural Areas - an ongoing nationwide research-action project aimed at incubating and analyze creative tourism activities in small cities and rural areas of Portugal. This project aims to develop and pilot an integrated approach and research agenda for creative tourism by building strong links within and amongst regions, being informed by theoretical and methodological approaches from the cultural/creative sector development, and tourism and regional development.

In the scope of this project interviews and direct observation with 40 pilot-project cases in Portugal have been conducted during 2017-2019, and will be the main data source used for the analysis in this paper.

EXPECTED RESULTS: Further, the case study will lead us to discuss new challenges in the cultural and creative tourism field, as well as the associated impact assessment practices and how these can provide valid information for the formulation of integrated tourism and development policies in small cities and rural areas.

Ms Silvia Stuchi, Ms Sonia Paulino

Towards Sustainable Urban Mobility: service innovation and tactical urbanism initiatives

OBJECTIVES: Over the last decades, experiences of sustainable urban mobility have been increasing in large cities in developing countries, using temporal urban design strategies, e.g: Accra; Addis Ababa; Bandung; Bogota; Mumbai; Shanghai; Sao Paulo. This study aims to explore, from the service innovation perspective, the panorama of initiatives for active urban mobility in the city of Sao Paulo, considering: Reduced Speed Zone and Complete Street initiatives. On the assumption that sustainability transitions are valuable opportunities to stimulate innovation in services involving a variety of stakeholders and the environmental, social and economic issues (Djellal and Gallouj, 2018a; 2018b; Calabrese et al., 2018a, 2018b). In the same vein, the incorporation of broader innovation approach is required to explore the potential of service innovation to address sustainable urban mobility issues, including strategies as: developing human capital through education, culture, social inclusion, social innovation. This topic is a major driver of innovation and confirms that the impacts of innovation, far beyond the traditional concept of competitiveness, includes also environmental and social problems (Stare, 2013; Cruz et al, 2017; Djellal and Gallouj, 2018a; 2018b). Stare (2013) and Cruz and Paulino (2013) show that the challenges are even greater in contexts of developing and emerging economies, in a context of innovation substantially marked by the bias of technological innovation. In emerging economies, public services demand innovation not only in terms of efficiency gains, but also in terms of transparency and responsiveness to users '/ citizens' needs (Mohnen and Stare, 2013; Cruz et al, 2017). In this line, tactical urbanism is defined as small-scale, short-term interventions meant to inspire long-term change with the purpose of recovering urban spaces mainly through the engagement and participation of civil society (Lydon and Garcia, 2015; Ahmed and Elrahmanm, 2016; Cloutier et al., 2018). This study involves a global perspective of service innovation, providing a broad framework, addressing technological and non-technological innovations and taking into consideration all actors involved in the service. The non-technological innovations - organizational, relational, social, among others (Djellal and Gallouj, 2013, Mendes et al., 2017; Desmarchelier et al., 2018) play a relevant role in public services innovation.

METHODOLOGY: The research methodology is spatio-temporal boundered in the megacity of Sao Paulo, which has about 12 million inhabitants (IBGE, 2017) and cars are responsible for 73% of greenhouse gases emissions and the excessive and poorly planned use of private motorized transport overly occupy the urban space, damaging the quality of urban vitality. The period from 2015 (due to the Sao Paulo Mobility Plan) until January 2019 was considered for data collection; and is based on four steps:

1. Identification and mapping of active mobility initiatives
2. Cases studied selected: Sao Miguel Paulista and Santana Reduced Speed Zones and Joel Carlos Borges Complete Street

From the reduced speed zone and complete streets initiatives mapped, case studies adopted in the research were selected by the following criteria:

- Developed in Sao Paulo;
- Multi-agent participation - involving municipal secretariat of urban mobility and transportation, Traffic Engineering Company (CET) Government-Controlled Company and civil society;
- With emphasis on active mobility
- In line with the National Policy on Urban Mobility principles;
- Considering benefits for quality of life: reduction of pollutants; reduction of noise pollution; reduction of accidents with pedestrians and cyclists. ● Adoption of tactical urbanism practices.

3. Primary and secondary data collection: reports and forms
4. The characteristics-based approach model for service innovation The innovative aspects introduced in the public service for active mobility is analyzed through the adaptation of characteristics-based model, representing an innovation in terms of service characteristics, adopting it as a multi-agent approach (Windrum and García-goñi, 2008; Gallouj and Weinstein, 1997; Gallouj, 2002; Gallouj et al., 2013).

EXPECTED RESULTS: Given the background, providers and users developed competences and applied specific techniques. The initiatives have contributed to develop service provider’s competences (theoretical and practical) related to urban reading and impact evaluation methodologies, as well as regarding to regular communication with users, resulting in a systemic view on the uses, local dynamics and behavioral aspects of the users. Such competences are associated with tactical urbanism as a technique for temporary urban interventions. Regarding to users competences was applied Propensity score matching method which aims to evaluate the impacts of an intervention through the comparison of groups. The relationship management generated relational and organizational competences for the proponent organizations. The results have demonstrated the strengthening of technical and operational capacity regarding the implementation of the initiatives. However, so far, the actions are restricted to speed limit reduction and horizontal signage to identify the areas boundaries. Therefore, many potential benefits have been listed to carry on with the introduction of innovations for the improvement and scale-up of public services for non-motorized transportation following the paradigm of sustainable urban mobility.